

MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

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WEEKLY.

BALTIMORE, JUNE 11, 1887.

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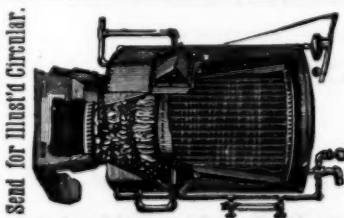
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AND OTHERS INTERESTED IN
Tunneling, Shaft-Sinking, Etc.

Engineers' Tables of Progress
With Maps, Illustrations, and Full Description of the
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NEW YORK. Size 16x16 feet; length 36 miles.
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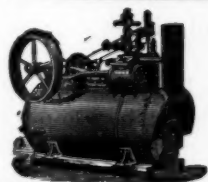
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"Perfection in House Heating By Steam."

The GORTON BOILER is a Wrought Iron Sectional Tubular Independent Steam Boiler, and needs no brick work in setting. The GORTON BOILER is made of Best Refined Iron and Steel. Can be used as Self-Feeding or Surface-Burning. It has been two seasons before the public, and received the highest praise of "Press, Architects, Builders and Physicians."

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Plantation Engines 8, 10 and 16 HORSE POWER.
FOR DRIVING Cotton Gins & Mills. with **Return Flue Boilers.**

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"Jas. Leffel Turbine Wheel"
The Best Water Wheel Ever Built.

If you are in need of a new or second-hand Wheel, write for our new Pocket Water Wheel Book for 1888. Address



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OVER 300,000 NOW IN USE. THE LIGHTEST, STRONGEST, BEST BALANCED and CHEAPEST in the WORLD.

Shafting, Hangers, Couplings, &c.

MEDART PATENT PULLEY CO., 1206 TO 1214 N. MAIN STREET, ST. LOUIS, MO.
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FRANK W. SWETT, MANUFACTURER OF BAND SAWS, 69 SOUTH CANAL ST. CHICAGO, ILL. EVERY BLADE WARRANTED.

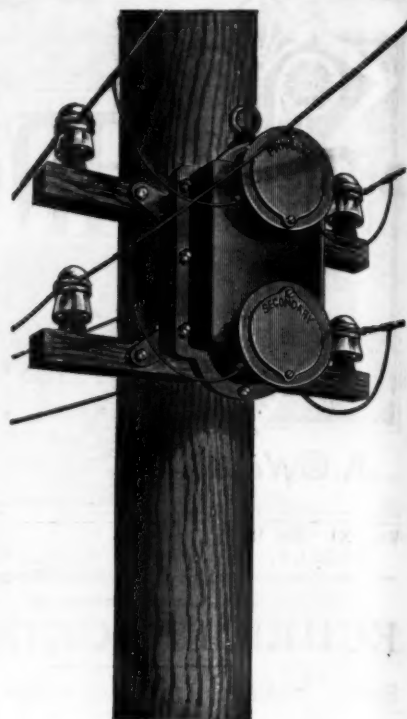


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**ALTERNATING
 SYSTEM.**

INCANDESCENT Electric
 Lighting from Central Stations
 made Universal, Economical
 and Profitable, irrespective
 of distance.

The Westinghouse Electric Co.
Pittsburgh, Pa.

Eastern Office, 16 Cortlandt St., N. Y.



The distribution of high tension alternating currents and their reconversion to low tension currents for incandescent lighting and running of motors, is broadly covered by patents owned by this Company.

The unauthorized offer of apparatus of this character by other companies is an infringement of our patent rights.

Notwithstanding the ownership of the exclusive right to furnish this system, THE WESTINGHOUSE ELECTRIC COMPANY proposes to sell its apparatus on such terms and for such low prices that no intending purchaser or user can afford to entertain a proposition for alternating current apparatus from others at any price, with the attendant risk following the infringement of its rights.

This is the only method of electrical distribution avoiding complicated wiring, feeders, feeder regulators and numerous other details that have prevented commercial success heretofore, and the only system that can displace gas.

This system costs much less than any other to install. It gives more light per horse power or per pound of coal consumed. It requires less copper for mains. There is less risk of fire. It costs less to operate and the station may be located on inexpensive ground with reference to cheap fuel.

The largest and most complete manufactory of electric lighting machinery in the country. The most efficient and durable lamps in the market.

Mechanically the most perfect electrical machinery ever produced.

The workmanship and materials of all apparatus supplied are of the best. The prices are based upon production in large quantities by means of special tools and machinery; and the elimination of all extraneous charges, such as commissions, stock considerations, and onerous conditions exacted by other companies, and which have placed many of their customers in such a position that improvements offered by others cannot be availed of.

No licensee is bound by contract to purchase longer from THE WESTINGHOUSE ELECTRIC COMPANY than the merits of its apparatus fully justifies.

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Eastern Office, 16 Cortlandt St., New York,

Has acquired the numerous inventions which have rendered the distribution of natural gas safe and profitable, and it has a process and apparatus now being protected by a series of patents for manufacturing a cheap fuel-gas, which meets all the requirements and will displace the use of coal for domestic purposes.

THE FUEL-GAS AND ELECTRIC ENGINEERING COMPANY, LIMITED, operating in conjunction with The Westinghouse Electric Company and the Standard Underground Cable Company, proposes to make electric lighting profitable to gas companies, by enabling them to use a part or the whole of their existing gas plants for the manufacture and distribution of fuel-gas, thus promoting a new and profitable business instead of rendering valueless large investments that have already been made in illuminating gas plants.

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Rubber Belting with SMOOTH METALLIC RUBBER SURFACE.

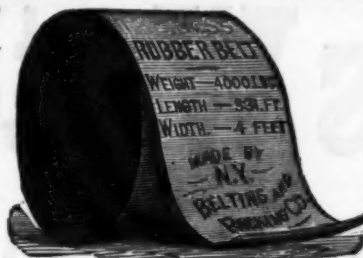
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DOES NOT
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DURABLE,
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Cotton "CABLE" HOSE. Circular, Woven, Seamless, Antiseptic, for the use of Steam and Hand Fire Engines, Force Pumps, Mills, Factories, Steamers and Brewers' use.

Patent Elastic Rubber Back Square Packing

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Recent improvements in material used and manner of casting have resulted in producing an article that will outwear from three to six of the ordinary iron goods. Also a Shoe and Die that will not "cup" or break at the shank. Send for Illustrated Circular. * When ordering send rough sketch with dimensions.

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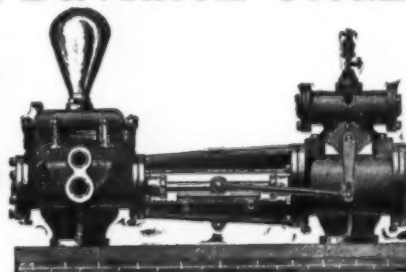
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WHETHER
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OF THE MOST IMPROVED PATTERNS.

CARDS,

Cylinders, 36x36 and 36x30, with 20 tops and Self-Strippers and Railway Troughs. Union Cards, with workers, strippers and tops.

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DRAWING FRAMES, ANY LENGTH, WITH 3, 4 AND 5 LINES OF STEEL ROLLERS.

English Slubbers and Fly Frames, With Long or Short Bolsters.

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RING SPINNING FRAMES, 2, 1¼, 1½ AND 1½ INCH RINGS.

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SELF-ACTING MULES, Parr, Sharp and Roberts' and Higgins' Pattern,

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Biddeford, Maine.

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Hercules Water Wheel

IN THE SOUTH.

WHAT SOUTHERN USERS SAY OF THE HERCULES.

There is probably no higher authority in the South on water wheels than Mr. John Hill, civil and mechanical engineer, of the great Eagle & Phenix Cotton Mills, at Columbus, Ga. Read what he says of the Hercules Wheel.

The Best Wheel We Have.

JOHN HILL, CIVIL AND MECHANICAL ENGINEER,
Reference—Eagle & Phenix Mfg. Co.

COLUMBUS, GA., April 30, 1887.

As to my opinion of the Hercules Wheel, will say: In our mill (the Eagle & Phenix) we have twenty-one (21) water wheels of various kinds, three of them being Hercules. I regard the Hercules as being by far the best wheel of any we have. It is the best in workmanship, absence from repairs, large per cent. in power, and in general satisfactory results. I know of no wheel its equal. At Holyoke, testing flume a few weeks since, I personally witnessed a test of a Hercules of the ordinary construction, which gave 83 96-100 per cent. of efficiency.

Yours truly,

JOHN HILL.

Cannot Speak too Highly of the Hercules Wheel.

JAMES RIDDLE, SON & CO.
Brandywine Cotton Mills.

KENTMERE, DEL., April 27, 1887.

In reply to your inquiry as to the working of a "Hercules Water Wheel" now running at our mills, would say that we put in nearly two years ago a 39-inch Hercules Wheel, running under a 14½-foot head. It is driving up to full regular speed three hundred and three heavy looms, with only half gate. We are about to enlarge the weave mill and add three hundred more looms, which will be driven by the same wheel. We cannot speak too highly of the Hercules. It has absolutely run without cost or derangement since it started, and has given eminent satisfaction in every way.

Yours truly,

JAMES RIDDLE, SON & CO.

Perfectly Satisfactory in Every Way.

PORTER WOOLEN MILL.

J. H. Porter, President. J. W. Robertson, Gen. Manager.

CLARKSVILLE, GA., April 29, 1887.

In reply to enquiry as to my opinion of the Hercules Turbine Water Wheel, say: I have put in two, one about

six years since, and the other in 1883, and think so highly of the wheel that I shall use another in cotton mill this company is now constructing. Neither of the wheels alluded to have given the slightest trouble, and their working has been perfectly satisfactory in every way.

Yours truly,

J. W. ROBERTSON, Gen. Man.

The Hercules Wheels Have Given Perfect Satisfaction.

ROSWELL MANUFACTURING CO.

Sheetings, Shirtings, Checks, Yarns, &c.

ROSWELL, COBB COUNTY, GA., April 29, 1887.

In answer to yours of 25th inst., asking our opinion of the Hercules Wheel, will say our experience is as follows: In our new mill, built about four (4) years ago, we put a 30-inch Hercules Wheel, under a 21-foot head of water. It has given such satisfaction running this (5,000) five thousand spindle mill, that last summer, when we were compelled to put in a new wheel at our old mill, running 7,000 spindles, looms, twisters, &c., we put in a 36-inch Hercules Wheel, under a 27-foot head of water. All I can say is we have surplus power in both mills, have lost no time by any defect of wheels, and if we were putting up any more mills, would use the Hercules Wheel. They have given us perfect satisfaction.

Yours respectfully,

F. J. MINHINNETT, Prest.

A Good Wheel, and Has Given Good Satisfaction.

PEE DEE MANUFACTURING CO.

Plaids and Warps.

ROCKINGHAM, N. C., April 30, 1887.

We have been using the Hercules Water Wheel for more than six years. Our superintendent says it is a good wheel, has given good satisfaction, and its performance is equal to the claims of the maker. We have a head of 17 feet. Our wheel has a diameter of 39 inches. Under this water pressure the wheel has moved 4,000 spindles and the needed preparation, and 164 plaid looms. The above includes the dye house, machine shop and all their machinery which we employ.

Very respectfully,

WALTER L. STEELE, Prest.

Best Wheels I Have Ever Seen.

MARIETTA PAPER MANUFACTURING CO.,

Book, News and Wrapping Papers.

MARIETTA, GA., April 30, 1887.

In reply to your favor of the 25th inst.: I am using four Hercules Water Wheels, two 12-inch, one 24-inch,

and one 30-inch. They have given me perfect satisfaction, and I think that they are the best wheels that I have ever seen.

Yours truly,

S. A. ANDERSON.

Has Never Given the Slightest Trouble.

PACOLET MANUFACTURING CO.

Jno. H. Montgomery, Prest. and Treas.

PACOLET, S. C., April 29, 1887.

Replying to yours of 25th, would say: We have a 54-inch Hercules Water Wheel running, under 20-foot head, 12,000 spindles and 338 looms, with other necessary machinery. Has been running about three and a-half years, and has never given us the slightest trouble; not an hour's stoppage during the whole time.

Very truly yours,

JNO. H. MONTGOMERY, Pres. and Treas.

Well Satisfied With It.

WM. J. RUSSELL,
Manager Princeton Factory.

ATHENS, GA., April 28, 1887.

I have used the "Hercules" wheel since 1881, and am so well satisfied with it that I should not purchase any other if in want of a first-class wheel. It does all the manufacturers claim for it.

Yours truly,

WM. J. RUSSELL, Manager.

Has Given Entire Satisfaction.

HOLCUMB'S ROCK, BEDFORD CO., VA.,
April 28, 1887.

The Hercules Wheel has given entire satisfaction.

Very respectfully,

J. A. HARRIS & CO.

Unhesitatingly Say its the BOSS Wheel.

BUZELA, GA., April 29, 1887.

I have been using a 21-inch "Hercules Water Wheel" since August 1880, and unhesitatingly say it is the BOSS wheel. It has performed with utmost satisfaction, and given more power than the makers claim, using water with more economy than any wheel I ever knew. T. W. G. Inglett, Esq., who has put up two "Hercules" for parties, says "it can't be beat."

Very respectfully,

BRAD. MERRY.

THE HERCULES

Gives the Most Power for its Size and the Highest Average Percentage from Full to One-Half Gate of Any Wheel Ever Made.

If you want to buy a new Water Wheel, if your old wheel does not give satisfaction, if you would like to know just how perfect a Water Wheel can be made, or if you are in any way interested in Water Wheels it will pay you to write for Catalogue No. 3 to the

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OPENERS, LAPPERS, REVOLVING FLAT CARDS, ELECTRIC STOP MOTION DRAWING FRAMES, SLUBBING, INTERMEDIATE.

ROVING AND FINE JACKS, (NEW PATTERNS 1886) ALL MADE BY TOOL WORK; EVERY PART EITHER

TURNUED, MILLED OR PLANED, AND CONTAINING MANY PATENTED AND VALUABLE

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Engineers and Machinists,

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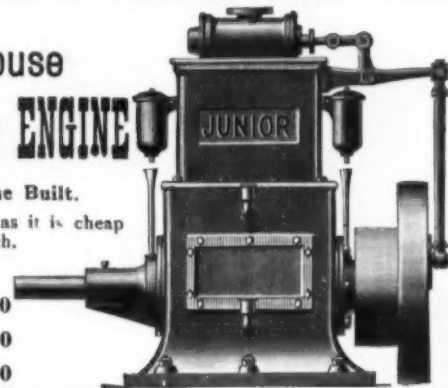
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"JUNIOR" Automatic ENGINE

As the CHEAPEST Engine Built.

And we guarantee it to be as good as it is cheap
Made in three sizes, in lots of 100 each.

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SHULTZ BELTING
IT BELTS THE EARTH AND MAKES THE MOON SPIN LIKE A TOP.
MANUFACTURERS OF
OUR BELTING
is tanned on the surfaces
only; the
INTERIOR is RAW HIDE.
Send for Our Valuable Book for Engineers and Belt Users. Free.
Agents in all Cities. Send for Trial Belt.
Address SHULTZ BELTING CO., St. Louis, Mo.

The DEANE STEAM PUMP CO.

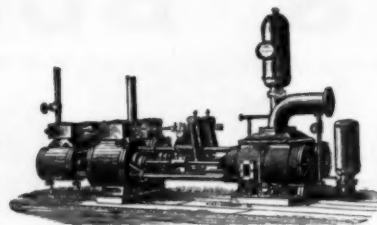
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STEAM * PUMPING * MACHINERY

OF EVERY VARIETY.

Send for New Catalogue No. 22.



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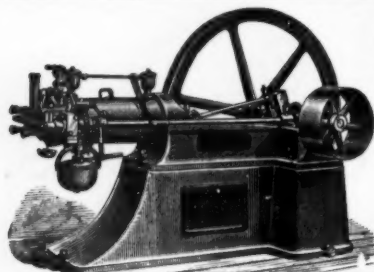
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Water Works ENGINES

FOR THE SUPPLY OF CITIES AND TOWNS.



Over 18,000 in Use. Otto Gas Engine

30 to 70 per ct. less Gas consumption than ANY OTHER ENGINE.

Working Without Boiler, Steam, Coal, Ashes or Attendance.

Started instantly by a Match, it gives full power immediately. When stopped, all expense ceases.

Guaranteed to Consume 25 to 75 Per Cent. less Gas than any other Gas Engine Doing the Same Work.

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Since the Invention of the Sawyer Spindle, the most Popular Spindle has proved to be THE BEST Spindle.

IS YOUR

Mill Supplied

WITH THE

Best Spindles?



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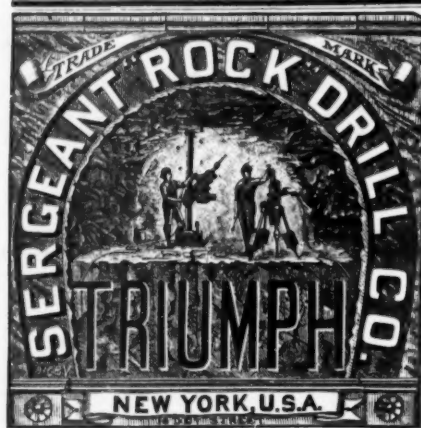
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Is undoubtedly the most economical and Satisfactory Spindle in the market for all ordinary numbers of yarns.

IF YOU HAVE NOT SEEN IT RUNNING, send for a Sample.

GEO. DRAPER & SONS, HOPEDALE, MASS.

Telegraph Address and Railroad Station, MILFORD, MASS.



The 'SERCEANT' ROCK DRILL

Is More Simple in Construction, More Effective in Operation, and

REQUIRES LESS REPAIR

THAN THE BEST-KNOWN ROCK DRILLS IN THE MARKET.

We are Prepared to Prove the Above Statement.

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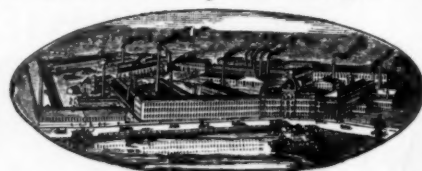
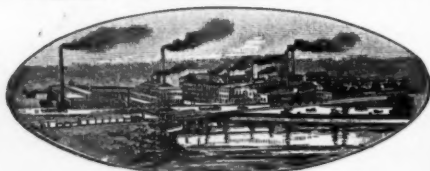
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Manufacturers' Record.

PUBLISHED EVERY SATURDAY BY THE
MANUFACTURERS' RECORD CO.J. W. BIGSBY, *Pres.*
R. H. EDMONDS, *Treas.*
WM. H. EDMONDS, *Secy. & Manager.*

R. H. EDMONDS, EDITOR.

—OFFICE—

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BALTIMORE.

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SUBSCRIPTION \$3.00 A YEAR.

BALTIMORE, JUNE 11, 1887.

Mischievous Misstatements.

The New York Tribune of May 24th contained on its editorial page a paragraph which, because of the mischief often made by such careless misstatements, we reproduce for comment. The man about town of the Tribune's staff, who collects the materials in hotel corridors and other public resorts for his entertaining paragraphs, must have been hard up for matter when he handed in the following:

Persons who come up from the South are not all agreed as to the future of that part of the country, although in a large way the New South is loudly praised for its developing energy. Occasionally some man who has failed to take the Southern fever, even after an extended examination of the field, comes to New York. This was the case with L. S. Robertson, of Boston, who has been in Alabama for nearly two years. He was formerly in the commission business in Boston and has made considerable money in real estate in the South, but is going back to the Bay State. Among other things he said: "The New South is a great thing, undoubtedly a great thing, but the boom cannot last always and there will be backsets that will make men's hair turn gray. All that there is of the New South to-day is Birmingham. Atlanta and Chattanooga are prosperous, but their growth is not to be counted as a part of the development of the New South. I know a great deal about Birmingham, having spent much of my time there, and I know enough about the Southern climate and the lack of drainage and sanitary provisions in places like Birmingham, so that I in some measure anticipate what will one day take place there. It was many years ago, before the present development of the town and of the coal and iron fields, that Birmingham had a scourge of yellow fever. The large growth of the city has been attended with disregard of sanitary regulations, and they are certain to have trouble there this summer and in subsequent years, unless they seize time by the forelock and take precautions against an epidemic. In a general way, the South is not an inviting place for Northern men. The present activity is largely due to the work of new men. The climate is so enervating that a Northern man cannot keep the pace above two or three years. Then he falls out from sheer enervation, and it takes as many darkies to wait on him as it does on an ordinary Southerner. They get so lazy that they would ask a darkey to pick up a pencil that they dropped upon the floor."

An analysis of the foregoing shows either that the Boston man from Alabama was not correctly reported, or else that he was exceedingly careless in his statements. "Mr. Robertson," it is alleged, has been in Alabama nearly two years, having spent most of his

time in Birmingham. He "has made considerable money in real estate in the South," and is now going North to remain and presumably to enjoy himself. He has discovered that "all there is of the new South to-day is at Birmingham," that while Atlanta and Chattanooga are prosperous, yet "their growth is not to be counted as a part of the development of the New South." What a preposterous proposition for one to make who, going there a stranger and spending the greater part of his time in a single city, "has made considerable money in real estate in the South," all this in less than two years residence. Most business men would have been satisfied to have secured a substantial footing in a new country during that brief period, but this exceedingly smart man (the Tribune's report being true) went to Birmingham, studied the "New South" until he saw that there was nothing to it except Birmingham, then set himself to the task of making hay while the sun shone, and because of the boom there he made it ("it" being equivalent to lots of money), and then he shook the dust from his feet and hastened North to warn his people that this "boom cannot last always and there will be backsets that will make men's hair turn gray."

The MANUFACTURERS' RECORD is greatly indebted to "Mr. L. S. Robertson, of Boston," (if there be such a gentleman, and if the Tribune's man reported him correctly,) for he has given us an opportunity to say a few things that should be generally understood: First. There are those of the North who, having gained their personal ends at the South, are ready to defame it, under the mistaken supposition that by so doing they will advance their own interests among those with whom they are more immediately associated. Second. There are those at the South who, zealous for the honorable record of its people, denounce the use of the phrase "New South," because they fear that if generally adopted it may destroy the reputations of those, living and dead, whom they deservedly held in highest honor. Both are grievously mistaken. The intelligence of the North rejoices in the conviction that the South is at one with the people of every other section in hopes, aspirations and ambitions. Were it not so there would be no such flow of capital and immigration southward, as every intelligent student of current events recognizes. There would be no "Southern boom," for this boom, so called, is but another illustration of the wisdom concentrated in that ancient fable of Jove and the carter, wherein the latter was told, "put your own shoulder to the wheel and then Jupiter will help you." Because Southern manhood asserted itself in every field of endeavor, and in so doing commenced those practical investigations that have brought to light the unmeasurable wealth of nature's storehouses,

the attention of mankind has been turned in that direction, and not American capitalists only but many of Great Britain and continental Europe have been there, made their examinations and then their investments. Great is Birmingham, but that busy iron city is no more the New South than are Atlanta, Chattanooga, Jacksonville and Galveston. The New South is not a term applicable to geographical boundaries, nor does it mean a new generation of men. The phrase concentrates and expresses in two words the work done in the last quarter of a century, and the ideas that gave inspiration to the workers. It represents that sterling American spirit prevailing the South, that, "hoping all things, enduring all things," places its people shoulder to shoulder with their fellow-citizens the country through, in all their work, their progress, their successes.

For the concluding absurdity of "Mr. L. S. Robertson, of Boston," we have but a word. "In a general way the South is not an inviting place for Northern men," says he. "The present activity is largely due to the work of new men." Ah, indeed! "The climate is so enervating that a Northern man cannot keep the place above two or three years." Really this Boston man, who kept the place long enough to make what money he cared to, ought in decency to be just to those of his compatriots, who settled South after the war, and have taken part in its prosperity, working in unison with the old Confederates. We venture to say there is more energy in the little finger of General Warner, of Alabama, of Kimball, of Georgia, of Gen. Wilder, of Tennessee, of Mullen, of Louisiana, of French, of North Carolina and of a hundred thousand other men, of whom these are typical, who have settled South since 1865, than there is in the whole physical organization of any one who makes such ridiculous statements. At the grand review in Washington in 1865, the elastic step, the erect figure, the wiry muscular appearance of every veteran in the ranks, advertised to the world that there was nothing in the Southern climate to impair physical manhood. If four years of endurance as good soldiers of burning heats, of heavy marches, of every possible climatic exposure, produced such stalwart men, then what kind of a man physically must this Bostonian be, who, in less than two years, has become so enervated that he needs "a darkey to pick up a pencil dropped on the floor!"

Seriously, it is time that misrepresentations should be stopped, and that those who indulge in them should be subjected to the ridicule their folly deserves.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the MANUFACTURERS' RECORD.

A Question of Salt.

That well known newspaper, the New York Times, has a contributor who used to sign his numerous and long-drawn effusions "The Parsee Merchant." Lately he has thrown off that thin disguise and appears in his own proper personality as Mr. J. S. Moore. This voluminous contributor to the Times is a Cobden Club free-trader. To state all that is implied by that term would occupy more of our valuable space than the subject would warrant. Suffice it to say that the gentleman in question belongs to that class of theorists which can see no policy for the world equal to that which obtains in Great Britain. Bluff John Bull, pushing ahead remorselessly, caring little who is trampled or gored so long as his own interests are secure, is to all men of this "Parsee Merchant's" way of thinking the guide and exemplar for the world. For a year or two this writer and others of the same kidney have been, seemingly, greatly exercised because of the alleged burdens put upon American farmers by the existing tariff. A recent effusion of the particular writer we have named ends as follows: "But my hitherto attention to the farmers is only begun. I intend to show them how the tariff swindles them out of their hard-earned substance in hundreds of different necessities of life they have to use." The character of this heavy job that Mr. Moore has undertaken may be inferred from the very long article of which the paragraph cited is the conclusion. He devotes the main part of it to an assault upon the protected salt industry. His argument is ingenious rather than ingenuous. At the outset he quotes the figures of the Tenth Census to show that while the number of men, women and children in the United States pursuing gainful occupations was 17,392,099, yet of these the total employed in manufacturing, mining and mechanical work was but 2,738,895. These, said this sophistical writer, constitute "the actual army, officered and marshaled by protection, to whom the whole population has to pay tribute in the shape of taxes." Of this number, less than 7 per cent. are children under 16 years of age. The remainder, 2,556,974, represent not only themselves, but those to whose support they contribute. Putting this number at only four to a person (which is within bounds) and we have 10,227,896 persons, or a fifth of the population of the United States at the time the census was taken, who are supported by work in manufacturing, mining and mechanical occupations. The principal cost of living in all civilized countries is the cost of food and clothing. As all the materials for clothing come from agriculture, and all the food, (except so much as is gathered from salt and fresh waters,) it follows that a very considerable part of the income of the 7,670,493 persons reported as engaged in agriculture is

derived from these more than ten millions of people who are supported by the wages of these several occupations. There were engaged in personal and professional service and in trade and transportation in 1880 5,884,494 persons, which were but 1,786,000 persons less than the total number reported as engaged in agriculture. It requires no close investigation to determine that fully one-half of those nearly six millions engaged in personal and professional service and in trade and transportation derive their subsistence from those employed in mechanical, mining and manufacturing pursuits, and so are able to be purchasers of the products of agriculture. Mr. Moore and writers of his kind utterly ignore such self-evident propositions as the foregoing, and back up their objections to protection with twisted figures and misleading inferences. They fear the truth as satan is said to fear consecrated water.

But to the question of salt. "Let me show the farmer," says Mr. Moore, "what tax he pays on that awful luxury to man and beast, known as salt." He then quotes from the treasury reports for 1886 the figures showing the value of the salt imported that year and the amount of duty paid thereon; also the value of the foreign salt used by our fishermen, on which no tax was paid, and the value (\$5,000,000) of the salt produced in this country, having done which, he proceeds with this unwarranted but entirely characteristic assertion, (we do not give the language, but brief his statements.) There were employed in salt production in this country in 1880, 4,289 men, women and children. The remainder of our vast population paid a tax of \$3,000,000 to keep those few people employed. The foregoing is an assumption absolutely without the shadow of foundation, but it is enough to enable Mr. Moore to say: "Let the farmers of this country reflect upon this. Let them feel ashamed of the paucity of their understandings, as it is really difficult to see how millions of men with common understanding can submit to become a mob of consumers and be fleeced by an organized army of protectionists." The coolness of this proposition is refreshing at this season, but not more so than this other that "the tariff laws are so beautifully arranged that it treats some as loving children and others as step children. The fishermen, being the actual children of Eastern tariff-makers, get their salt for curing fish free of duty," and in another place the same falsehood is more closely localized by speaking of "the fishermen of Gloucester," as if they were the only beneficiaries of this wise system of drawback. The great fisheries all along the Atlantic, Gulf, Pacific and lake coasts are ignored. The millions of poor laborers to whom salt fish is a chief staple of food are forgotten, but the impression is sought to be made that tariff protection is for the East alone, and that its drawbacks are solely in favor of the people of that section. The foregoing is but a sample of the unfairness—to use no harsher term—which characterizes all the advocates of free trade.

Eastern Carolina.

[Special correspondence MANUFACTURERS' RECORD.]
ELIZABETH CITY, PASQUOTANK CO., N. C.,
May 28, 1887.

The city of Edenton, with its charming environs, is not the only desirable residence place on the upper or northern side of Albemarle sound. Another is this city, affectionately called by some of its people Bessie's City. This was years ago the southern terminus of trade from Norfolk that came through the Dismal Swamp canal. That artery of commerce is an ancient institution that has seen its best days. It served the purpose of its creation admirably during the period immediately following its construction, but since the Norfolk Southern Railroad came into operation the canal has been superseded for general travel and freight, and is of use only in floating out the timber growing along its line, or in and around Lake Drummond, that great body of water which fills its ditch and furnishes the floating medium for whatever passes through it. A story is told of a witty and wise gentleman who, in 1866, sought to get control of this canal for speculative purposes. He saw one man in high position whose fiat it was necessary to secure and told him all he knew about it. Numerous questions were asked, all of which were satisfactorily answered except the last, which was: "How many dams are there in the feeder?" The gentleman did not know, but, quick as a flash, he said: "To tell you the truth, Mr. Secretary, in its present condition the whole thing is not worth a dam." The official made no further inquiry, but gave to the applicant every privilege he desired. A broad creek empties into the Pasquotank at this point and the business part of the city lies along the front of the great bend in the river above the mouth of the creek. Vessels drawing ten feet of water can come up to the docks, and have been able to do so ever since the first settlement. This commercial advantage made this city a rival of Edenton in colonial days and for some years after the declaration of independence. Then the people here, who had less wealth and culture, but more business ambition than their neighbors a few miles west, laid themselves out to capture the salt, sugar and molasses trade, and succeeded to a considerable extent. The bankers from all points came here for supplies more generally than to any other, because the intimate trade relations between the local and Norfolk merchants enabled the former to take all their spoils of the sea at some price, in pay for the goods wanted. The region round about was unusually fertile, and especially adapted to the growth of corn, the small grains, grass and clover. Corn and the cereals were the principal crops and the surplus left over from home consumption was enough to load many schooners every season. The farms in all these Northern counties of Albemarle were immense holdings. Their owners were rich in negroes as well as land, and made big staple crops annually. There was little or no ostentation, but much refinement and culture. The Athens of the district was Edenton, but the social influences from that center radiated through the entire region. The war came on and changed the old conditions. There was then in Elizabeth City a population of 2,000 or more. It was a place of many stores and warehouses, and of pleasant, unpretentious residences. The majority of its voters had opposed secession, but when war was declared they had no option but to go with the Confederacy. It was done with such comminglings of sorrow and enthusiasm, as probably never characterized the beginning of civil strife in any other land. They were between Virginia and South Carolina. There could be no neutrality. They must decide either to fight with or against those to whom they were bound by family, social and religious ties. There could be but one choice under such circumstances, and so with tears at

parting from the Union of the fathers, and cheers for the cause they had espoused, they mustered their battalions and went to the front. In the spring of 1862, after the fall of Roanoke Island, a naval fight occurred at the mouth of the Pasquotank river, in which the Confederate fleet was destroyed, and thereafter this town was more or less under surveillance of the Union gunboats, and peace reigned within its borders. When the naval fight was decided in favor of the federals there was a general abandonment of the town, and parts of it were fired by the retreating troops and citizens. Fully one-third of the city was destroyed. After 1865 there was little to stimulate the enterprise of the people. Most of them were without money, the obstructions put by order of Gen. Wise in the dismal swamp canal remained, so that it was a day's travel from here to Norfolk, and the water route by Currituck sound and the Albemarle and Chesapeake canal was a long way round. There were, however, a few men here who had great faith in the country and were determined to make its resources known, and before many years they succeeded in inducing enterprising men with capital to come and engage in business. The railroad also has been a great advantage since it was finished. The present population exceeds 5,000. There are many stores carrying heavy stocks, a cotton net and twine factory, one for cedar buckets, another for buggies and other vehicles, five saw and two planing mills, and a variety of minor industries. Quite a number of citizens are actively interested in the spring fisheries, which, in the season just ended, have paid handsomely. There is one hotel, the Albemarle, a large building with commodious bed chambers, parlors and other apartments, that if the tide of winter travel should set in this direction could be made one of the most popular hostleries of the Albemarle section. It is kept by an elderly lady, Mrs. L. G. Underwood, whose manager, Mr. J. A. Norris, a courteous and agreeable gentleman, makes it his business to see that his guests are duly cared for. The property is owned by some party North, who wishes to sell it. Any one wishing to engage in the business and to keep a first-class house for tourists would find this a desirable investment. Three papers are published weekly, all of which are doing careful and excellent work for the prosperity of the section. Two are Democratic, one Republican, but their political discussions are conducted without acrimony, and in all that concerns the progress of the country they work in unison.

In the suburbs to the East of the city is Creecy Park, an enclosure of fifteen acres, the private enterprise of Capt. Samuel Waters, a farmer and fisherman who came here in 1869 from his home in Columbia county, Pennsylvania. Taking this tract of undrained land, on which was a young growth of forest trees and a tangle of vines and shrubs, he cleared a portion, ditched it, planted an orchard, and cultivated field crops.

Finding that near the river the uncleared land was a deep peaty soil, resting upon a clay hard pan, and that this was a huge water saturated sponge, he conceived the idea of turning it to account by digging out all the shallower portions, draining the waters from the surrounding ground into these meandering excavations, and so creating a picturesque pond, which could be stocked with fish while it made an attractive feature of his proposed park. Acting upon this idea he began operations some three years ago, and in the interval he has created one of the most unique fish ponds to be found in the world. It is like the snake's track in the old ryme, that

Wound in and wound out,
And left the people still in doubt
Whether the snake that made that track
Was going out or coming back."

This meandering pond is of all widths from 15 to 75 feet. It empties into the Pas-

quotank river and is on its level, so that when the wind drives the river shoreward because the broad waters of Albemarle sound are propelled in the same direction, the pond rises, but when the wind blows the other way it falls proportionately. There is method and practical sense in this peculiarly crooked fish pond. Because there can be no regular flow in and out to keep its waters stirred, and therefore without stagnation, it is necessary to have its surface ruffled by every wind that blows. Turning and twisting in every conceivable direction it catches the winds from all quarters, and thus necessary agitation is secured. On the knolls created by making this pond the best of the trees have been left growing, but all the vines and underbrush have been removed, the ground has been dug over and seeded with rice. The object of rice planting is to exhaust the acidity of the soil and prepare it for grasses and flowers. In the water are pond lilies and several varieties of aquatic vegetation. The fish grass, so called, (I did not get its botanical name,) is the feeding and hiding place for the small fry. Capt. Waters has now in this pond more than a dozen varieties of native fishes, black bass being the most numerous and valuable. It is interesting to see one of these mother fish entice her family of little ones (from 2,000 to 3,500 strong) from the nest where they were hatched to the safe defences of the fish-grass coverts. She moves along slowly, rising and sinking as may be needed to keep them well together, until they reach the place of refuge. Halting it, she thrashes about with her tail until she has made space enough for the new colony and has seen it well under cover. Then she leaves them abruptly and takes no farther concern for their welfare. The plume-like grass is covered with minute seeds on which the youngsters thrive, its circling tendrils shut them in from perch and pike and all other foes, and there they stay increasing in size and strength until they get old and strong enough to fight their own ways. Connected with these ponds, but at some distance, are large tanks set in the ground, in which are kept and fed turtles, terrapins and eels. When winter sets in these are sent to Northern markets, the eels in pounded ice, the others alive. The feeding of these varieties during the warm season puts them in fine condition for winter, and they command higher prices than those caught in their native waters. The proprietor is intending to double the dimensions of his pond as fast as he can, and expects that it will pay him a handsome profit upon the cost of making and sustaining it. It is a well-planned, carefully-executed enterprise that promises to be very profitable.

B. S. P.

Arkansas Mining Notes.

The Arkansas Mining & Smelting Co., of Hot Springs, to test the correctness of assays on their gold and silver ores recently had three tests made, respectively at Hot Springs, St. Louis, and by the Smithsonian Institute, at Washington, D. C., which resulted as follows: The Hot Springs assay yielded \$102 in metal to the ton, the St. Louis test \$105, and the Smithsonian \$108, the same test ores being used for all three assays.

This company have a tunnel 58 feet on one of their 13 claims, which lie close together about seven miles north of Hot Springs, and which show up many leads, intersected by stratas of solid rock and something resembling fire-clay. Stratas of white quartz have also been struck, and the superintendent thinks he is near the main vein of ore. Other claims will be opened soon.

If you are not already a subscriber to the BALTIMORE MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year, or six months for \$1.50.

Mining in Arkansas.

What a Mining Expert from the
Coeur d'Alene Mines of Idaho
Says about the Newly-
Discovered Arkan-
sas Mines.

[Special correspondence MANUFACTURERS' RECORD.]

HOT SPRINGS, ARK., June 2, 1887.

Mr. Andrew Evans, a well-known and prominent miner from the Coeur d'Alene mines of Idaho, who is enjoying the famous waters of Hot Springs, made a visit to the mines at Bear Mountain, Crystal Springs and Silver City at the instigation of several prominent New York and Boston capitalists with whom he has been connected in mining operations in the West, to report on the mineral resources of Arkansas and the advisability of investing in the rapidly approaching mining boom. In conversation with the writer, Mr. Evans stated that he had only been here one week and has had time to examine only a few of the various "prospects," which include the Phoenix, Lost Louisiana, and the Waterloo and Minnesota mines of Silver City. He states that the Lost Louisiana mine is a good one, and the ore being taken out is undoubtedly good, as it carries gold and silver in paying quantities. The Waterloo is a splendid mine; the ore is white quartz, bearing cube galena, which carries silver and lead in large quantities. The Minnesota mine is on good property, but the shaft has been sunk in the wrong place, and the appearance is that the shaft-house was built at random and the shaft sunk with a hope of striking the vein. I like the ores of the Phoenix Co. much better than any of these, however. They are composed of clay, clay slate, galena, pyrites of native silver, bearing a resemblance to some of the richest ores found in Idaho, and will prove more valuable as the shaft is sunk down. My experience with similar ores has been that as you sink deeper the pyrites disappear, while the lead and silver are found in greater quantities. I went into the tunnel of the company in the Accident Mountain and found as fine development work as I ever saw. The tunnel is in about 200 feet, cross-cutting the veins, and is about 6x6½ feet in diameter in the clear, and has an iron track, dump cars, etc., and is to be lighted by incandescent lights. The foot wall is of decomposed quartzite, and the hanging wall talco slate, which I consider very favorable indications of pay ore. They have encountered two veins of galena ore, the vein matter being about 12 feet wide, and will yield an average of from \$30 to \$40 in silver alone per ton. They have a very fine assay outfit, and are making assays on the ore every day to determine the comparative value of the mineral as the tunnel is driven in. According to a report made by Prof. Stillman on the top rock, it carries 5 pwt. of gold and 221 ounces silver, valued at \$7.21. The gold will disappear entirely after sinking on the vein, and silver and lead will predominate in largely increased quantities. From 40 to 50 per cent. lead will be obtained.

These ores are present in almost endless quantities, far exceeding anything I have ever heretofore seen, and the values are amply sufficient to justify any outlay of money in the prosecution of developments, and the chances for failure are but meagre indeed. The manganese ore belonging to this company and being taken out of their four shafts at Garden City, is undoubtedly the largest and finest body of ore I ever saw in my life, and carries silver anywhere from 12 to 20 ounces per ton.

The general formation of the country is good and bears a marked resemblance to the successful mining districts of Idaho, Montana and the Black Hills, only the cap-rock here carries more mineral than there, and more especially does the topography of the country resemble that of the Black Hills, and lays in stratas or belts from 500 to 600

feet between their contacts. I observe that nearly all the veins here are true fissure or contact veins. The slate, quartzite and porphyry, forming plutonic rock, are component parts of the mineral-bearing ores of Arkansas, and even this rock will assay from a trace to 2 or 3 ounces in silver, with more or less of gold.

I have obtained these results by assays made in the laboratory of the Phoenix Company.

Mr. Evans further stated that the result of his brief examination had justified him in telegraphing his associates to come on immediately, and no doubt, ere this, good property has been secured and will be speedily developed by many Eastern capitalists.

Little is known by the outside world of the immensely rich deposits of minerals in this State, which is due in a great measure to the fact that no geological survey has ever been made of the State and the few railroads which traverse it have given little chance to experienced eyes to detect the indications which have now led to valuable discoveries.

Little credence is given the rumors of vast undiscovered mineral wealth, and the reported assays are so rich that everyone seems to doubt the truth and consider it all a hoax. But facts grow stronger each day as cynics who visit the mining district and see for themselves readily become convinced, and instead of ridiculing, invest their money in mines or real estate.

The writer heard of a rather comical incident yesterday, which will not be out of place in illustrating how easily non-believers are converted. A late arrival at the springs from Colorado, who was an old retired miner, learned through the personal column of one of the local papers that one of his particular friends, who had been sojourning at the springs, had just gone to Bear City to prospect and look at property. The Colorado gentleman, suspecting that his friend might be induced to invest in what he thought worthless property, immediately telephoned for a team and buggy, and departed for Bear City to warn his friend and save him from a wild speculation. Arriving at Bear City he was surprised to find an active and growing mining camp, and meeting some of his old mining acquaintances, who took him around to see various mines, he soon became not only converted, but quite enthusiastic over the bright prospects, and he spent several days at the mines.

Upon returning to Hot Springs he was asked "if he had saved his friend," when he was forced to acknowledge that out of \$5,000 which he had with him when he arrived he had invested \$4,500 and sent home for more. And this is only one instance out of many.

Real estate is on the boom and more is being bought by the dealers than is offered by them for sale. Lots in Bear City which 3 months ago could be bought for \$50 each now bring \$200 to \$300, and there is so much building now in Bear City that it taxes the saw and planing mills for miles around to fill the demand for lumber and building material. Truly Arkansas is on the eve of a great boom, which the discovery of such valuable mineral resources as she possesses can alone give.

C. P. DAY.

Eastern Kentucky Coal Fields.

[Special correspondence MANUFACTURERS' RECORD.]

PIKEVILLE, PIKE CO., KY., May 27, 1887.

It was announced some months ago in the columns of your excellent paper that a railroad was being constructed from Charleston, S. C., to Chicago, known as the Charleston, Cincinnati & Chicago Railroad. That road passes through the iron belt, which is widely known as the Cranberry magnetic iron, in Western North Carolina and East Tennessee, which deposit of iron is about one hundred and sixty miles south of this place. The road then passes through East Tennessee and Southwestern Virginia, and

enters into Kentucky at the beaks of the Cumberland Mountain, at the east end thereof, at which point the Big Sandy river, which flows into the Ohio, passes through the mountain. This point where the river breaks through the mountain is eight hundred and fifty-four feet above the level of the sea, which is the lowest gap known in the range of this system of mountains. At this point the road strikes the great coal field of Kentucky, or, at least, of this section of Kentucky. Four miles below the beaks is the mouth of Elkhorn creek, which is recently coming into notoriety as a great coking coal belt. But I desire to note here that the coke of this county is not confined alone to the Elkhorn region, but exists throughout the hills of this entire county. Perhaps it may not at other points lower down be as good as the Elkhorn deposit, but in order that your readers may know what our best coal is, I will give you the analysis of the best and lowest grades of our coal, that no one may be deceived in it. The analysis that I now give is made from the Connellsville test, from coal sent from these coal seams to that place to be tested, which was done by the directors of the Geological Survey of Kentucky. The following is the analysis of the Elkhorn coal:

No. 2,399. Seven feet bed, with a two-inch parting six inches above the middle. A firm, pitch black, pure-looking coal, showing very little fibrous coal, and no apparent pyrites.

No. 2,400. Two feet thick or more. A pure-looking pitch black coal.

No. 2,401. Bed nearly four feet thick.

No. 2,402. Whole thickness one hundred and one inches, sample collected from lower 44 inches. A fine-looking pitch black coal, breaking easily, fracture generally irregular cuboidal.

No. 2,403. From same bed, sample from the upper part of the bed, &c., &c.

No. 2,404. Slack coal, from Elkhorn creek of Big Sandy, from which the coke No. 2,413 was made at Connellsville, Pa.

No. 2,407. From Stone Coal creek, four and a half miles below Pikeville, taken from upper two feet and eight inches.

No. 2,408. From the same bed, taken from the lower three feet.

No. 2,409. From the head of Chloe creek two miles and a half South of Pikeville. Average sample taken from the lower four feet and eight inches. Entry drum 30 feet. A pure looking pitch black coal, showing very little fibrous coal and no apparent pyrites.

COMPOSITION OF THESE PIKE COUNTY COALS.—(Air dried.)									
No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
2,399.	2,400.	2,401.	2,402.	2,403.	2,404.	2,407.	2,408.	2,409.	2,413.
Specific gravity.....	1.283	1.307	1.371	1.378	1.371	1.379	1.373	1.373	1.373
Hydroscopic moisture.....	3.60	3.60	3.60	3.60	3.60	3.60	3.60	3.60	3.60
Volatile combustible matter.....	34.30	34.30	34.30	34.30	34.30	34.30	34.30	34.30	34.30
Fixed carbon in the coke.....	66.80	66.80	66.80	66.80	66.80	66.80	66.80	66.80	66.80
Total.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Character of the coke.....	Dense.	Dense.	Sp. Ky.	Sp. Ky.	Sp. Ky.	Sp. Ky.	Sp. Ky.	Sp. Ky.	Sp. Ky.
Color of the ash.....	Lt. buff.	Lt. buff.	Lt. buff.	Lt. buff.	Lt. buff.	Lt. buff.	Lt. buff.	Lt. buff.	Lt. buff.
Percentage of sulphur.....	.418	.467	.499	.721	.810	.967	.051	.051	.051

These are the analyses of some of the best Pike county coal, and also of the lowest

grade of our coal. So the reader can judge for himself as to their value. I have quite a number of other tests, but do not think it necessary to give them. There are 528,429 acres of land in Pike county, all of which is a solid coal field. The location of Nos. 2,407, 2,408, 2,409 are 660 feet above the level of the sea, and Nos. 2,399, 2,400, 2,401, 2,402, 2,403, 2,404, 2,407, 2,408, 2,409 are located between 1,451 and 1,975 feet above the level of the sea. So I have given you the lowest and highest in their formation or deposits. In addition to this we have a wonderful forest of timber, such as walnut, ash, poplar, all the oaks, hickory, locust, beech and birch, etc. Limestone and fine clay all abound in this county. Pikeville is the county seat, situated at the head of steamboat navigation on the Big Sandy river, with sufficient room to build a city of 20,000 inhabitants. Between this place and the Cranberry iron ore beds is an abundance of the red hematite iron and within 60 miles of Pikeville. Steamboats navigate our river, with a capacity of tonnage for carrying of from 75 tons to 100 tons. Pikeville is 105 miles south of Ashland, Ky., and at the foot of where the heavy grade will begin in the railroad, and is therefore a suitable place for the round house and machine shops. With all the natural advantages above given why cannot Pikeville be made a manufacturing town as soon as the C. C. C. Railroad is completed? With the coke, coal, lime, clay and forest, and in close proximity to iron, with the advantage of river navigation, I cannot see why capital should not seek investment in this section in the way of manufacturing, &c. Pikeville is now building a new court-house at a cost of \$23,700, besides the furniture, &c. Sofern & Green, of Tennessee, have a contract of furnishing to the Singer Manufacturing Co. two and one-half million feet of walnut lumber per annum, and are now putting up mills to cut it. These mills are now being erected, but they will put in whatever may be required to cut the lumber contracted to be delivered. About 300 men are now at work on the C. C. C. Road on the river coming to Pikeville, and we are looking every day to see that number increased to 5,000.

C. M. PARSONS.

Railroad Developments in Kentucky.

[Special correspondence MANUFACTURERS' RECORD.]

MT. STERLING, KY., May 30, 1887.

Southeastern Kentucky, hitherto known as the railroad desert of America, is now attracting the attention of investors, and railroad enterprises are being pushed into that almost unknown region of coal, timber and iron ore. The Kentucky, Charleston & Western Railroad Co. now have representatives in the field on this proposed line inspecting its resources and the practicability of the route. The line of this road is to begin at Newport, Ky., just across the river from Cincinnati, O., and runs slightly east of south by way of counties of Pendleton, Robertson, Nicholas, Montgomery (this county), Powell, Lee, Owsley, Clay, Leslie and Bell, to Cumberland Gap, and there to connect with system of roads leading to the seaport at Charleston, S. C. This line that runs through Southeastern Kentucky is now being minutely examined by the chief engineer, some of the directors and eminent geologists from the East with a view to reporting exactly as to the resources of this country. Mr. J. S. Spaulding, of Binghamton, N. Y.; Senator C. R. Early, of Pennsylvania; E. A. Reser, of Denver, Colorado, and others, are among this party of inspectors. They propose to build first from this place—Mt. Sterling, a town of about 5,000 inhabitants situate on the belt of the famous blue-grass region and in 12 or 15 miles of the mountains of Southeastern Kentucky, and located on the Newport News and Mississippi Valley Railroad, 109 miles from Cin-

[CONTINUED ON PAGE 712.]

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

Anniston.—It is reported that the Anniston & Cincinnati Railroad Co. are preparing to build a round-house and machine shops.

Birmingham.—The Alice Furnace Co. will repair and reline their No. 2 furnace.

Birmingham.—The Arlington Land Co. has been chartered by Charles W. Van Vleck, Charles A. Brown and W. M. Sherrburne. The capital stock is \$50,000.

Birmingham.—The capital stock of the Walker County Coal Oil Co., reported last week as incorporated, is \$50,000. They are negotiating for the boring of a 3,000-foot well in Walker county. If oil is found in sufficient quantity they will pipe it to Birmingham and build a refinery.

Birmingham.—The Jefferson Building & Improvement Co. are building 31 houses and will shortly erect 12 more, to cost from \$1,000 to \$5,000 each.

Birmingham.—The Leeds Land Co. has been organized with J. A. Montgomery as president, and G. B. West, secretary and treasurer.

Birmingham.—The Coaldale Brick & Mining Co., capital stock \$100,000, has been chartered to mine coal and other minerals and manufacture coke, tile, brick, &c.

Birmingham.—The De Bardeleben Coal & Iron Co. will hold a meeting June 30 to increase their capital stock.

Birmingham.—The Birmingham Iron Works are increasing their capacity for making cast iron pipe.

Brewton.—Blacksher Bros. will rebuild their drying kiln, reported in this issue as burned.

Calera.—Another shoe factory will be started. The Calera Land Co. can give particulars.

Clayton.—A company will probably be formed to establish a guano factory.

Danville.—The Danville Asphalt Oil & Mining Co. has been organized with Samuel Blackwell as president; N. A. Barret, vice-president; L. P. Troup, secretary, and J. M. Kitchens, treasurer. The authorized capital stock is \$100,000. The company own about 9,000 acres of mineral and oil lands, which they will soon develop.

Decatur.—W. G. Wharton, H. G. Bond, W. E. Forest, E. E. Greenleaf and J. D. Roquemore have incorporated the Decatur Railway Co. to build the street railroad previously reported.

Florence.—The name of the company previously reported as organized to build a rolling mill is the Eli Rolling Mill Co. Its capital stock is \$150,000.

Florence.—Over \$500,000 have been subscribed toward organizing the company to build the three 150 ton iron furnaces, previously reported. The Florence Land, Mining & Manufacturing Co. may give information.

Florence.—The Florence Land, Mining & Manufacturing Co. will build a wharf to cost several thousand dollars.

Florence.—It is proposed to form a new company to build water-works.

Gadsden.—The Gadsden Electric Light Co. will, it is said, put in an additional dynamo.

Guntersville.—John W. Perkins has opened an iron ore mine.

Guntersville.—There is talk of a paint factory being erected.

Hull.—A saw mill will be erected by Cincinnati parties.

Montgomery.—The Montgomery Real Estate Co., capital stock \$200,000, has been organized with H. C. Moses as president and C. A. James, secretary and treasurer. The company will erect a large six-story iron-front building.

Northport.—A saw mill has been erected by David Higdon.

Sheffield.—Alfred Parrish, of Philadelphia, Pa., and Dillwyn Parrish, of London, Eng., have purchased the Sheffield & Birmingham Railroad and will complete it.

Trinity.—Joseph Shackelford, M. N. Norris, Jackson Gunn, F. M. Davis, S. M. Hosmer and others have chartered the Decatur & Trinity Land, Improvement & Manufacturing Co.

Troy.—The name of the company previously reported as being organized to establish a cotton-seed oil mill and guano factory is the Pike County Guano Co. John R. Green, of Atlanta, Ga., is president; John R. Darby, secretary, and A. H. Rainer, treasurer. The capital stock is \$35,000.

Troy.—School buildings to cost \$10,000 are to be erected. Charles Henderson can give particulars.

Tuscaloosa.—Messrs. Harris, Guild, Turner and Minge have recently bought 100 acres of clay lands, and will organize a stock company to manufacture fire-brick, &c.

Tuscaloosa.—A cigar factory is to be started by Charles Michael and Julius Withering, of Logansport, Ind.

Tuscaloosa.—The Tuscaloosa Coal, Iron & Land Co. will build a dummy railroad.

Tuscaloosa.—It is reported that arrangements are being made to build water works. The Tuscaloosa Coal, Iron & Land Co. can give particulars.

Wetumpka.—The Wetumpka Lumber Co. are repairing and improving their mill.

Woodlawn.—The Woodlawn Land & Improvement Co., capital stock \$75,000, is being organized. Will build a hotel.

Woodstock.—It is reported that the Edwards Iron Co. are preparing to put their furnace in blast.

ARKANSAS.

Arkansas.—It is rumored that Gould, Pearce & Co., of Cincinnati, O., contemplate moving their cotton factory to some point in Arkansas.

Bear.—The Exeter Mining Co. are developing mines.

Bear.—Mines are being developed by the C. F. French Mining Co.

Dallas.—Mr. Worthington will erect a 10-stamp mill and smelting works at his mines near Dallas.

Dallas.—Mr. Henry is developing gold mines near Dallas.

Fort Smith.—The Fort Smith, Paris & Dardanelle Railroad Co. have surveyed their road, previously reported, and are now letting contracts for ties and grading.

Fort Smith.—The Oak Park Land Co., capital stock \$100,000, has been incorporated with J. L. Tilley as president.

Fort Smith.—The Fort Smith, Howard & Northwestern Railroad Co. has been incorporated in Kansas to build a railroad from Fort Smith to Salina, Kan.

Hot Springs.—P. W. Masters will form a company to prospect for mines.

Hot Springs.—Taylor & Booker are developing gold, silver and lead mines 16 miles south of Hot Springs.

Hot Springs.—Mr. McGimpsey, J. Jumper, Andrew Sanders and Mr. Anderson are opening mines near Hot Springs.

Independence County.—The Cambria Iron Co., Johnstown, Pa., have secured 8,000 acres of ferro-manganese lands.

Little Rock.—D. O'Keefe is opening granite quarries.

Madison.—The saw mill of H. Binn, reported in this issue as burned, will be rebuilt.

Mammoth Spring.—Napoleon Hill, W. S. Bethel, J. W. Cochran, Samuel Tate, Jr. and E. Goldsmith, of Memphis, Tenn., J. M. Archer, Mammoth Spring, and others have purchased the Mammoth Spring property and propose to establish a manufacturing town.

Marion County.—The Stetcher City Mining Co. are developing manganese and hematite ore lands.

Pine Bluff.—It is reported that the Emma Oil Mills will be enlarged.

Pine Bluff.—B. N. Coronna will erect a two or three story brick building, 40x110 feet.

Pine Bluff.—Bids for building a church will be received until June 14, by R. S. Thompson.

Potash Sulphur.—P. W. Masters, of Hot Springs, is organizing a company to develop mines near Potash Sulphur.

Rogers.—J. A. C. Blackburn contemplates erecting a roller flour mill in Madison county.

Texarkana.—J. G. Temple & Co. have bought considerable mill machinery.

Warrenton.—The Little Rock, Mississippi River & Texas Railroad Co. (office, Little Rock) will extend their railroad from Warrenton to Camden, 45 miles.

FLORIDA.

Arcadia.—Sohanson & Isgreen are erecting the saw and planing mill reported last week.

Black Point.—As soon as the extension of the South Florida Railroad (office, Sanford,) to Black Point, reported last week, is completed, extensive docks and piers will be built.

Bronson.—J. V. Burke and others are organizing a \$200,000 stock company to develop iron ore lands.

Bronson.—Benjamin Eager has erected a large lumber mill at Wacasassa, near Bronson.

Bronson.—The Michigan parties reported last week as buying 38,000 acres of mineral lands from J. V. Burke, will erect a lumber mill plant to cost about \$50,000.

Bridgeport.—Michael Renz contemplates starting the saw mill reported last week. If he does not start the mill he will erect brick works.

Clearwater Harbor.—A planing mill is reported to be erected.

Crescent City.—Martin & Strickland have moved their saw mill to Killarney.

Denver.—A brick-yard has lately been started.

Ellzey.—George W. Moody will erect a large lumber mill.

Enterprise.—O. DeG. Bertola contemplates establishing a fertilizer factory.

Fernandina.—The time for receiving bids for building the water-works, previously reported, has been extended to July 15.

Lake Buffum.—A saw mill has been erected by Mr. Davis.

Lake Butler.—The Lake Butler Stone-ware Co. are erecting pottery works and contemplate adding tile works.

Lake Worth.—The report last week that the Jacksonville, Tampa & Key West Railroad Co. (office, Jacksonville,) will build a branch to Jupiter is premature.

McAlpin.—C. K. Dutton has moved his turpentine works from Live Oak to near McAlpin.

Mikesville.—A. M. Means has purchased machinery to start a flour mill.

Orange Park.—It is rumored that a company is to be formed to start a cotton factory near Orange Park.

Ormond.—A wooden bridge, 3,000 feet long, and a hotel, to cost from \$20,000 to \$30,000, will probably be erected by a stock company, of which John Anderson is manager.

Pensacola.—B. R. Pitt contemplates erecting an electric light plant.

Tampa.—William B. Henderson and others will build a draw-bridge across the Hillsborough river.

Tallahassee.—The bills introduced in the legislature to incorporate the Etowah Canal Co.; the Key of the Gulf Railroad Co.; the Alabama Midland Railway Co.; a company to can and deal in fruit, &c., at St. Lucie and Crystal River; the Georgia, Florida & Key West Railway Co.; the Suwanee & Gulf Railroad Co., and the Chippewa Lake Land & Investment Co. have become laws.

Tallahassee.—A bill has been introduced in the legislature to incorporate the Osceola Sugar Co.

GEORGIA.

Athens.—Gunn & Murray will establish extensive brick works. Have purchased machinery.

Atlanta.—The Magnolia Starch Co. have started a factory on Alabama street.

Atlanta.—The American Cotton Seed Oil Mill & Fertilizer Co. has lately been chartered to manufacture cotton seed oil and fertilizers, and the Wine of Life Co., capital stock \$15,000 to manufacture patent medicines.

Atlanta.—The Atlanta Lime & Cement Co., recently organized with J. A. Burns as president, will establish works at several points in Georgia. The capital stock is \$10,000.

Columbus.—D. R. Bize, R. M. Mulford and E. H. Epping have incorporated the Columbus Land & Improvement Co., capital stock \$30,000.

Columbus.—L. Meyer has started a clothing manufactory on Broad street.

Columbus.—The Muscogee Manufacturing Co. will at once build an additional cotton mill. It will be four stories and have a capacity for 400 looms.

Concord.—J. T. Trice has erected a four-story wood-working factory.

Conyers.—W. V. Almond will establish a coffin factory.

Cumming.—The Sawnee Gold Mining Co. have commenced developing their mines.

Dahlonega.—W. P. Price and others contemplate building a railroad.

Dalton.—Barrett, Denton & Lynn, previously reported as contemplating putting roller machinery in their flour mill, have purchased machinery with a capacity of 200 barrels per day.

Ellijay.—Martin V. Teem has rebuilt his whisky distillery, reported last week as burned.

Fort Buffum.—W. N. Willson is refitting his mill with new machinery. He has added planing machinery.

Fort Valley.—A. L. Van Tassel is erecting a fruit evaporating factory and will add a canning factory.

Greenville.—J. B. Winslow has made arrangements to start a fertilizer factory next fall.

Griffin.—The contract to build 157 miles of the Birmingham & Atlantic Railroad, previously reported, has been let to Mason, Carpenter & Co. W. E. H. Searcy is president.

Homer.—Haulbrook Bros. will add to their saw mill, machinery for manufacturing agricultural implements.

Lexington.—Negotiations are being made for the building of a dummy railroad to Crawford, 3 miles.

Macon.—The Georgia Southern & Florida Railroad Co. will build repair machine shops during the construction of their road, but have not decided upon any plans.

Macon.—It is stated that English & Co. will erect a cotton compress.

Macon.—The name of the company lately reported as being organized to manufacture iron wagons, is the Hatcher Iron Wagon Co. The incorporators are M. J. Hatcher, Rollin Jefferson, W. H. Felton, J. H. Hamilton, W. P. Hunt and others. The capital stock is \$100,000.

Marietta.—The American Marble Co. will enlarge their works by adding 6 gangs of saws.

Milledgeville.—Samuel Walker will build water works.

Salt Springs.—Electric light machinery has been erected by the Salt Springs Co.

Savannah.—Louis McLain has received the contract to complete the Savannah & Tybee Railroad.

Savannah.—The Arkwright Cotton Mills are being considerably enlarged.

Social Circle.—The Walker County Guano Co., capital stock \$25,000, has been organized to manufacture fertilizers, with John M. Green, of Atlanta, as president, W. A. Kelly, manager, J. O. Shepherd, secretary and treasurer, and E. W. Mansfield, Atlanta, superintendent. A site of 5 acres has been bought and buildings will be erected at once.

Tate.—The Georgia Marble Co. will add 24 gangs of saws to their marble mill.

Union Point.—It is reported that the Newsom gold mine will soon be developed.

Woodstock.—W. H. Perkinson has erected a saw mill.

KENTUCKY.

Auburn.—A. E. Griffith has ordered roller machinery to refit his flour mill.

Bardstown.—Beane, Shehan & Co. will erect a flour mill.

Bowling Green.—John L. Row is increasing the capacity of his flour mill to 100 barrels daily.

Carlisle.—Rogers & Bastian are rebuilding their flour mill, putting in roller machinery. The daily capacity will be from 75 to 100 barrels.

Cattlettsburg.—John G. Patton & Co. have overhauled their flour mills, and put in an outfit of roller machinery.

Covington.—James Spilman will receive proposals for laying water pipes until June 17.

Cynthiana.—\$5,000 has been subscribed to bore for natural gas.

Elkton.—The flour mill of G. B. Lewis has been refitted with new machinery.

Fairfield.—B. W. Humphrey is building a roller flour mill, with a daily capacity of 50 barrels.

Lexington.—The Lexington Street Railroad Co. will extend their lines.

Lexington.—The Broadway Christian Church will erect a \$10,000 building.

Logan Mills, (P. O., Adairsville).—W. P. Orndorff contemplates erecting a small roller flour mill soon.

Mayfield.—W. J. Slayden, S. B. Wright and Henry Reeves will build a flour mill.

Mt. Sterling.—The Eastern Kentucky Land Co., capital stock \$3,000,000, has lately been organized. R. A. Mitchell is interested and can give information.

Mt. Sterling.—Weedon & Botts will erect a 3-story hotel. J. A. Bassett is preparing plans.

Owensboro.—The Owensboro Wharf boat Co., capital stock \$30,000, has been organized, with J. D. Powers as president.

Pikeville.—Soford & Green are erecting lumber mills.

Richmond.—The Richmond Natural Gas Co., capital stock \$100,000, has been organized, with D. M. Bright as president, and D. P. Armer, secretary.

Scottsville.—R. S. Evans is building a large saw and planing mill.

Scottsville.—A saw and planing mill will be erected by John Follis.

Scottsville.—T. Mehone, of Louisville, is prospecting for a site for a stove factory.

Scottsville.—E. L. Malley, of Bowling Green, is boring for oil.

Scottsville.—Leo Brigel, of Cincinnati, O., and associates have leased about 10,000 acres of oil and gas lands, and will shortly commence boring. They will make a proposition to light and heat Scottsville with natural gas.

Stanford.—The Presbyterians will erect a new church to cost \$6,000.

Stanford.—A roller flour mill has been erected by W. N. Potts.

West Louisville.—A narrow gauge railroad is projected to Owensboro.

LOUISIANA.

Alexandria.—The Southern Cotton Oil Co., of Philadelphia, Pa., will build a large warehouse.

Franklin.—The St. Mary Central Sugar Factory & Railroad Co., capital stock \$250,000, has been formed to establish a sugar factory, &c.

New Orleans.—The wagon factory of Thomas O'Connor's Sons, previously reported as burned, will be rebuilt by Thomas O'Connor, Sr.

New River.—Mr. Picard is erecting two new gins and a 40-horse power engine.

Plaquemines Parish.—Simpson, Homer and Mr. Payne will add some machinery to their sugar factories.

Shreveport.—The Southern Cotton Oil Co., of Philadelphia, Pa., contemplate building a large warehouse.

Shreveport.—The Southwestern Petroleum & Mineral Developing Co. has been organized to develop oil, coal and iron lands. B. S. Wetterwork, Nacogdoches, Texas, is president; N. Gregg, vice-president; J. G. McWilliams, secretary, and A. Currie, treasurer. The capital stock is \$100,000.

St. Charles Parish.—Three additional boilers and other machinery are being added to the sugar factory on H. A. Lessassier's Trinity plantation.

St. Charles Parish.—R. Viterbo will add a two-roll supplemental mill to his sugar factory on the Edmee plantation.

St. John Baptist Parish.—Some improvements are to be made to the sugar factory on the Back Arment plantation and the St. James refinery.

St. John Baptist Parish.—The sugar factory on the Front Arment plantation is being overhauled, and some new machinery is being added.

St. Martin Parish.—The sugar factory on the St. John plantation is being repaired and improved.

MARYLAND.

Baltimore.—The Zell Engineering Co., of New York, will build works to manufacture the Zell boilers, if they can get \$50,000 subscribed to their stock.

Baltimore.—Robert Garrett, Howard Munikhuyzen, and Mr. Grubb have purchased about 2,000 acres of timber and iron ore lands near Baltimore, which they will develop. They have an option on the furnace property, at Canton, of D. M. Reese & Sons, and propose to establish car wheel works.

Chestertown.—The contract to build a brick church for the Methodist Protestants has been let to Milton Baker at \$17,500.

Cumberland.—The Flintstone Land & Mining Co., previously reported, has been organized with F. Laing, Jr., as president; C. G. Knieriern, vice president; James Ash, secretary, and D. M. Bussard, treasurer. The capital stock is \$25,000.

Derwood.—A steam flouring mill is being built.

Ellicott City.—Joseph Cone is sinking an artesian well, and will build a system of water works.

Germantown.—Levi L. Watkins has purchased flour mill machinery.

Indian Springs.—M. L. Peck has improved his flour mill and put in some new machinery.

Mechanicstown.—The Mechanicstown Water Supply Co., previously reported, will receive bids for building their works.

Oakland.—H. A. Rasche has ordered some new machinery for his flour mill.

Oxford.—The Oxford Manufacturing Co., capital stock \$10,000, has been organized to manufacture toys and novelties. James H. Willis is president; Wm. M. Bergman, vice-president, and Charles F. Stewart, secretary and treasurer.

Washington, D. C.—An automatic gas company has been organized with John B. Allen as president, and R. C. Goodrich, secretary.

MISSISSIPPI.

Aberdeen.—The city has by a popular vote decided to subscribe \$60,000 to aid in building a 12-mile branch railroad from Aberdeen to the Kansas City, Memphis & Birmingham Railroad.

Duck Hill.—The Mississippi & Tennessee Iron & Manufacturing Co. has been organized with W. D. Bethely, of Memphis, Tenn., as president; H. M. Neely, D. D. Wilkens and James R. Binford, as vice-presidents, and G. T. Mays, secretary and treasurer. The company have purchased, and will develop timber and mineral lands.

Greenville.—A brick yard will be established.

Mississippi City.—It is reported that the Gulf & Ship Island Railroad Co. will spend not less than \$500,000 in building a pier 3 miles long and a breakwater.

Natchez.—The Natchez Cotton Mills Co., whose mill was reported last week as damaged \$30,000 by an explosion, will purchase new machinery at once, including a 450 horse-power engine and a battery of 4 boilers.

Pass Christian.—There is talk of a charcoal furnace and chemical plant being erected.

Woodville.—A subscription of \$10,000 has been voted to the Natchez & Fort Scott Railroad.

Yazoo City.—There is talk of a cotton factory being erected.

Yazoo City.—A company is being formed to build a large cotton warehouse. John F. Powell can give information.

NORTH CAROLINA.

Asheville.—R. N. Adams & Son have started a furniture factory.

Charlotte.—Wright & Co. have the contract to build a railroad in Georgia.

Knob Creek.—John Cline will rebuild his shingle mill previously reported as burned.

Ledger.—Mr. Thomas will develop a mica mine.

Lincolnton.—T. L. Houser has received the contract to build a railroad in Alabama.

Murphy.—Manganese ore lands are being developed by Nashville (Tenn.) parties and a Richmond (Va.) company will soon begin operations. Mr. Cordon, 9 Broad street, Atlanta, Ga., can give information.

New Berne.—J. M. Hines has started a furniture factory.

Pantego.—The John L. Roper Lumber Co. contemplate erecting a large lumber mill.

Raleigh.—J. C. Brewster has made a proposition to build a sewerage system.

Randleman.—The Naomi Falls Manufacturing Co. are putting in another large new boiler.

Salisbury.—Steam granite works are to be erected soon.

Salisbury.—C. W. Corrier will establish a fertilizer factory.

Staley.—A saw and planing mill is being erected by A. C. Burgess & Co.

Wilmington.—The Smith Bridge Co., of Toledo, O., have received the contract to build the iron bridge, previously reported, at \$15,200. It is to be completed within 4 months.

SOUTH CAROLINA.

Charleston.—R. Rhode & Co. will increase the capacity of their grist mill.

Columbia.—George K. Wright will organize a company to build a cotton factory. The capital stock is to be \$250,000.

Enoree.—The Mountain Shoals water power has been purchased by Mr. Coffin for Charleston parties, who will organize a company to build at once a large cotton factory and about 100 tenement houses. About \$500,000 will, it is said, be invested.

Graniteville.—The Graniteville Manufacturing Co. are putting automatic sprinklers in their Graniteville and Vancluse Cotton Mills, and are building a warehouse at each mill.

Orangeburg.—Water works are to be constructed. George H. Cornelson can give particulars.

Rocky Well.—P. I. Rawl is repairing his flour mill and has purchased some new machinery.

South Carolina.—The Ottawa Falls Improvement Co. has been formed.

Sumter.—The contract to build the extension of the Atlantic Coast Line from Sumter to within 4 miles of the Santee river, previously reported, has been let to J. D. Hardin, of Cheraw. It is to be completed by April 1, 1888.

Troy.—J. T. Solomon, G. A. Morris and others will organize a company to build a hotel.

TENNESSEE.

Atwood.—J. H. Keaton & Co. will put roller machinery in their flour mill.

Bristol.—The flour mill of D. S. Gadsby is being improved.

Bristol.—W. R. Inkley will build a hotel to cost \$47,000. It will be four stories high.

Buckeye.—Coal mines will be opened by James George, John Jenkins and others, of Knoxville.

Chattanooga.—James R. Cravens, Jesse R. Cravens and Charles C. Anderson have chartered the Cravens Land Co.

Chattanooga.—The New South Wagon Works, of Shelbyville, contemplate moving to Chattanooga and enlarging.

Chattanooga.—R. H. Hunt, G. W. Thompson, W. A. Willingham and others contemplate establishing brick works. Are investigating a new patent brick machine.

Chattanooga.—Bemiss & Simonds, of New Orleans, La., contemplate erecting an incandescent electric light plant, but as yet have reached no decision.

Chattanooga.—The Vehicle Spring Co., previously reported as to enlarge their capacity, are erecting a new factory, 2 stories, 40x60 feet. It will be completed by July 1.

[CONTINUED ON PAGE 714.]

[CONTINUED FROM PAGE 709.]

cinnati, O.—a branch standard gauge road penetrating the canal and bituminous coal fields of the Upper Licking valley, to connect here with their main line. The work on this road is to commence as soon as survey can be completed, so say the projectors, and is to cost, all told, \$15,000,000. The company is able to build.

In addition to this road the Huntington system have bought out the Cincinnati & Southeastern Railroad, a narrow gauge road, running from Huntington's, Ky., Central line near Maysville, Ky., near the Ohio river, to Hillsboro, in Fleming county, Ky., and they now have their engineers surveying the route by way of Salt lick, Bath county,—some 20 miles east of this place—and then into the iron ore banks of Beaver creek, and on up the Red river valley and to Pound Gap. Those in a position to know and who appear to be posted, say this road will be built this summer. Whether the gauge will be changed hasn't been stated.

The Paris, Frankfort & Georgetown R. R. Co. has been reorganized and propose to build their road now by way of Mount Sterling into the coal and timber measures of the upper Kentucky river, which is the same

the various hardwoods indigenous to this clime—poplar, white oak, chestnut, hickory, walnut, ash, beech, maple, cherry, hemlock and black pine, with some large tracts of white pine. This section presents one of the finest fields for manufacturing investment in the South. ED. C. ORRER.

The Little Giant Saw Gummer and Jointer.

The accompanying cut illustrates a new and improved machine for grinding and jointing saws of all kinds, but specially adapted to circular saws, which is manufactured by Jerome Moltz, Williamsport, Pa. The working parts are all supported on the strong cast iron upright column, turned and fitted in the most substantial manner. The yoke, which holds the saw, is moved up or down on the turned part of column by means of a rack and pinion, which facilitates the adjustment of different sizes of saws to the wheel, and is a great improvement over the old method of hand-wheel and screw. The saw is fastened on the arbor, which revolves in a sleeve that is readily moved to any position in the slot of yoke, and secure-



THE LITTLE GIANT SAW GUMMER AND JOINTER.

field that the Kentucky Union, tapping the N. N. & M. V. R. R., eight miles west of Mount Sterling, is endeavoring to reach this season. They have some 20 odd miles already in running order.

The Kentucky & South Atlantic, commencing at this place and running 24 miles into the coal and timber measures of Menifee county, which has been in the Federal court for some two or three years, is now ordered sold, and a company is organized to buy and extend it to the Beaver iron ore beds, said by experts to be of the very finest iron and steel making texture, only nine miles further, with easy grade.

The Eastern Kentucky Land Co. has organized at this place, with R. A. Mitchell, president of Farmer's National Bank and mayor of city, as president, and J. O. Miller, formerly manager of the Clear Creek Furnaces, as secretary; with capital stock of \$3,000,000. Besides several other smaller enterprises that all have a tendency toward booming Eastern & Southeastern Kentucky.

On the proposed line of the Kentucky, Charleston & Southwestern Railroad have been found in large and paying quantities canal and bituminous coal, iron ores, coking coal and stone, not to mention millions of acres of

ly fastened by nut on sleeve. In jointing the saw, the jointer, which holds an adjustable file, is moved on jointer bar up to the teeth of saw, and fastened by hand-wheel. The saw is then revolved by means of the crank on arbor. This not only insures perfectly accurate jointing, but also enables the operator to joint the saw before removing it from the machine, thus doing away with the necessity of putting the saw back on machine after it is once removed, to correct any unequal grinding of the teeth. The emery wheel is hung on an arm which passes through a cross-sleeve, and fastened in any desired position by a hand-wheel. It is also readily poised on shaft by means of a movable weight at the other end of the arm. The cross-sleeve is fastened to the shaft by set-screws, and the pulleys on this shaft are loose, which permits the shaft to oscillate with the arm holding the emery wheel,—another very valuable feature.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the MANUFACTURERS' RECORD.

The Florida Steam Heater.

The Florida steam heater, manufactured by the Pierce, Butler & Pierce Manufacturing Co., 14, 16 and 18 Clinton street, Syracuse, N. Y., is especially designed for warming private residences in city or country, hotels, stores, schools, churches, club houses, theaters, apartment houses, manufactories, business blocks, and public buildings. It is said to be the pioneer of portable cast iron steam heaters, and is designed to meet the popular demands of the public for a steam heater of small cost that is safe, durable, efficient and economical. After more than five

ring, without hauling fire, or interfering with the working of the heater.

The fire is controlled by an automatic regulator, which is attached to the draft door and check draft (as stated), and can be set to carry any pressure that may be desired. The fire is in the heart of the heater, and comes in direct contact with the lower sections. The center of the fire is from 10 to 15 inches thick (according to the size of the heater), and slopes off from the magazine to the sides, so that as the fire gets low the ashes do not lay against the fire surface and destroy its effectiveness.

The Florida is practically a self-feeder,

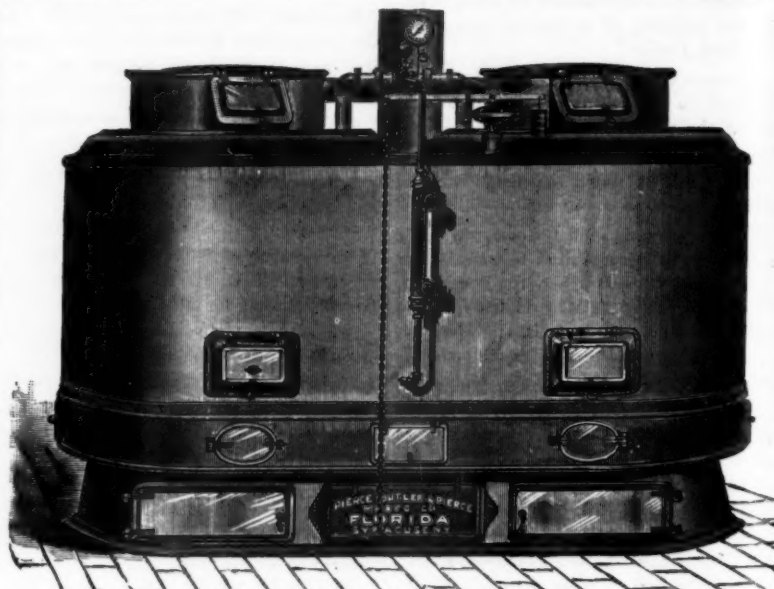


FIG. 1.—EXTRA LARGE SIZE OF THE FLORIDA STEAM HEATER.

year's successful use, the manufacturers now present the Florida to the public, changed slightly in a few minor details of construction, and so modified by experience in use that they assert "that it embodies more desirable, practical and economical features than any other heater on the market with any successful record of efficiency." The paramount virtue of a domestic steam heater is its absolute safety under every possible circumstance. It must be made of such material and constructed in such a manner that under the grossest neglect and mismanagement it will always be, at least, positively safe.

The cast iron water sections of the Florida steam heater are not made of common cast iron, but are cast from a most carefully mixed combination of ores, producing an iron of great tenacity and most desirable for steam-making purposes, as, through this open granular metal, more heat units are transmitted to the water than is possible to pass through the close-rolled fibrous metal of wrought iron. Being sectional and portable these heaters are readily placed in position in the cellar, and so simple in management that the ordinary house servant can manage them successfully, while the automatic draft and damper regulator will, without attention, so regulate the apparatus that a comfortable uniform temperature is maintained day and night throughout the winter.

The Florida steam heater is constructed of three or more hollow cast iron water sections of circular form, with six oval shaped return flues, and three water way openings cast in each. These openings in the sections, when set up, come in line, and form the perpendicular return flues of the heater and the water and steam communication between the sections. Every section before leaving the works is thoroughly tested under high pressure to avoid any possibility of imperfections. For the purpose of conveniently cleaning the flues, small holes connecting with return flues are cast through the steam dome, which are closed by iron stoppers. Through these holes the soot is easily brushed down into the soot chamber, and is removed through the hand-hole doors in jacket

and with little extra attention in management will successfully burn wood and soft coal as a surface burner.

There is nothing more important about a heater than its grate, and in this respect the Pierce, Butler & Pierce Manufacturing Co. claim great superiority. A good grate should be simple in construction, easy to shake, should readily dispose of ashes and clinker which collect on it, and should be so made that, when necessary, it may be dumped and cleaned with the least difficulty and dirt. By referring to Fig. No. 2 the working of the grate will be at once understood and appreciated. It cannot be dumped by mistake and the shaking and dumping are both done with closed doors, so that there is no escape of dust.

The Florida is constructed upon the American duplicate principle, so that if any



FIG. 2.—GRATE OF FLORIDA STEAM HEATER.

part is ever required for repairs, it can be promptly and cheaply replaced by a duplicate.

To meet the popular demands for an economical steam heater of sufficient capacity for warming public buildings, hotels, stores, churches, schools, apartment houses and that class of buildings, in which a uniform, mild, healthful heat is desired, the manufacturers have this season added to their list several extra large sizes of Florida

steam heater (see Fig. No. 1) in which are embodied some new and economical features, to which special attention is invited. They have constructed them with a view of combining in the one heater large capacity for cold weather and medium capacity for mild weather, the parts being so arranged as to practically operate to fire pots, two grates and two self-feeding fuel magazines, capable of being run separately or together, as required.

In cold weather both fires are run. In mild weather one fire is allowed to smoulder, or entirely go out, and the steam making capacity of the heater proportionately reduced, as also the consumption of fuel.

Particular attention is called to the following points: The Florida steam heater requires no brick work; its parts are all duplicates; it is sectional and easily handled; it is self-feeding or surface burning; it takes up little space in the cellar, being portable; it will carry steam continuously from 12 to 18 hours without attention in the coldest weather; the water circulates vertically over the fire surface in each section independently, being held in close contact with the fire until it escapes upward in the form of steam.

For catalogues, price lists, etc., address the manufacturers.

tween the chucks of the crimper shown on the left of the engraving; then, pressing the treadle with his foot, the can is clamped in position, and by the same motion the crimping wheel is brought to bear, fastening the end and body together instantly. The treadle being released, the can falls upon an inclined way leading to the chain belt, which rolls it along with the lower corner of the seam immersed in the acid bath, thus preparing the seam to receive the solder. The can passes over an inclined way to the soldering machine, and the chain belt rolls it through the solder bath, causing it to make several revolutions with the lower part submerged in molten solder, thus insuring the penetration of the solder into the seam, and consequently a strong and perfect joint. In this manner 35,000 can ends per day may be readily soldered, and experts in the management of the machine are said to average a much larger number.

A Remarkable House Builder.

A few months ago the Birmingham papers announced that J. W. Beaumont, a Western builder, had located in that town, and it

struction from beginning to end within 30 days is a marvel.

For many years Mr. Beaumont has been building in the West, and he states that once he completed 750 houses, part brick and part wood, within 5 months, or an average of 5 houses a day. He now employs about 120 hands in his work at Birmingham, every man being trained for a special line of work, and in the entire number there are, he says, no whisky drinkers. In fact, he will not employ any one that drinks, and as he treats his workmen with extreme kindness and liberality he has no trouble from strikes. As far as possible he uses labor-saving machinery in erecting his buildings, and especially in frame buildings, having once put up 15 houses without the use of a single hand saw. In some of this work he states that one cut by machinery can be made to equal 113 cuts by hand. He rarely makes any drawings for his buildings, simply guiding the entire construction, it may be of 50 or more houses at a time, by verbal instructions to his foremen. If you want a three-story brick building a hundred feet square, divided into stores or offices, painted and papered, Mr. Beaumont says he will agree to deliver it to you within ten days from the time the foundation is laid. Many of his methods are novel and instructive, and it is possible he says to erect at a very small additional cost over ordinary buildings, houses that will preserve a uniform

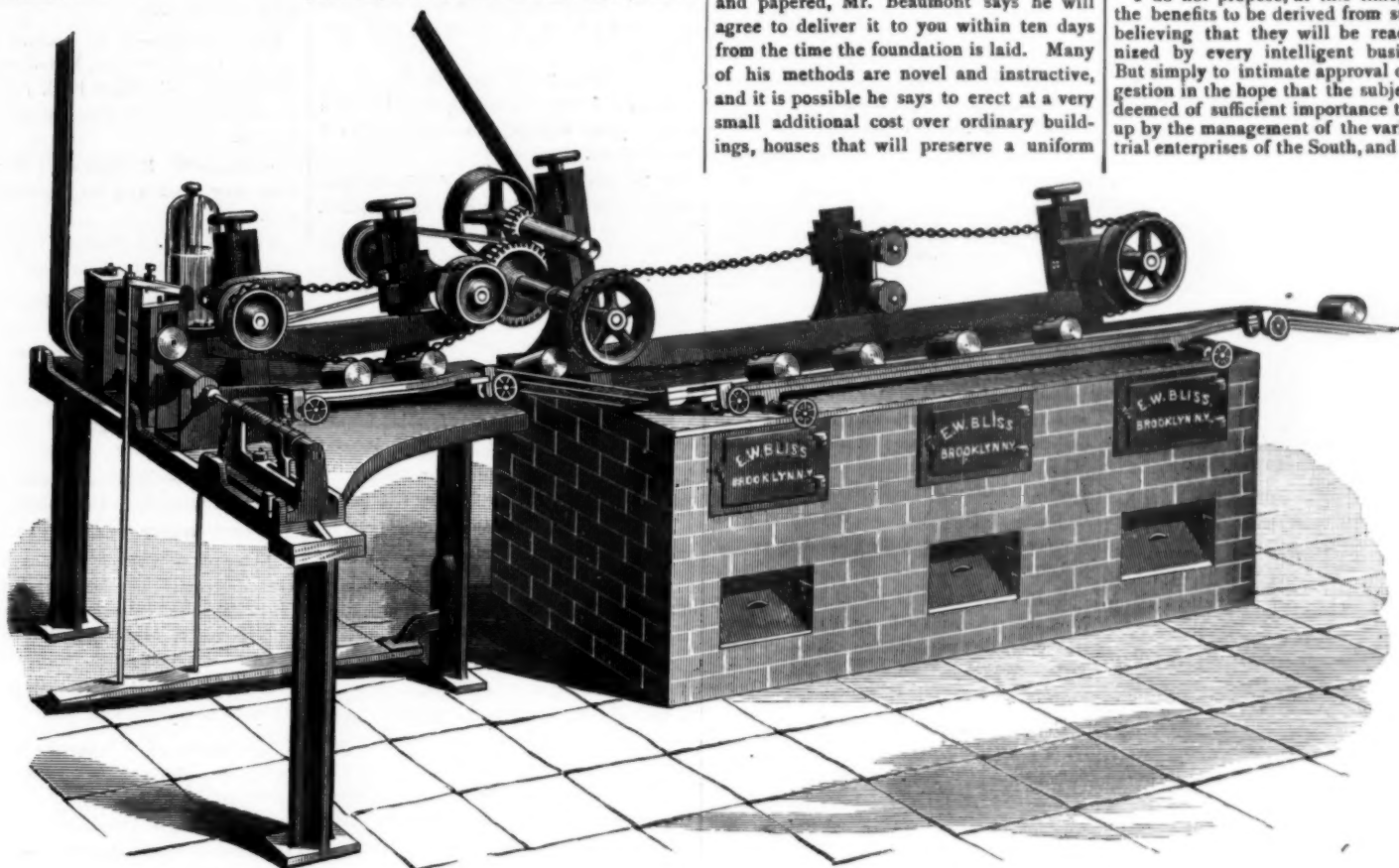
Southern Industrial Bureau— Meeting for Organization Suggested.

ATLANTA, GA., May 28, 1887.

Editor *Manufacturers' Record*:

My attention has been attracted by the suggestion of your correspondent "G" in this week's edition. Before reading his letter, and when the caption, "A Combination of Southern Land Companies Suggested," first caught my eye the momentary impulse was to take issue with him in strong terms. This impulse was the result of a misconception of the intent of his proposition as developed to my mind subsequently by carefully reading his letter. I should be very far from favoring any consolidation of the proprietary interests of land companies of the South. I have often thought, however, that an industrial bureau of information for the South would be very beneficial if properly managed. The communication referred to is the first intimation to my mind of a practical solution of this question. As stated therein, such an association composed of the various land and improvement companies in the South could be conducted at an expense, which, if equally borne by all, as your correspondent suggests, would not be felt by any.

I do not propose, at this time, to discuss the benefits to be derived from such action, believing that they will be readily recognized by every intelligent business man. But simply to intimate approval of the suggestion in the hope that the subject may be deemed of sufficient importance to be taken up by the management of the various industrial enterprises of the South, and that it may



"THE HOWE" IMPROVED SOLDERING MACHINE.

"The Howe" Improved Soldering Machine.

The illustration shows the improved soldering machine, with crimping and acidifying apparatus, made by the E. W. Bliss Co., of Brooklyn, N. Y., embracing the valuable features of the "Howe," "West" and "Bliss" patents, which are controlled by them.

The success of the "Howe" machine on the Pacific coast, where there are now more than 200 in use, has been most marked, being almost universally used in the extensive salmon canneries of Oregon, Washington Territory, Alaska, California and British Columbia. It is also used in the manufacture of fruit, milk and paint cans, and has become an important part of several elaborate plants of machinery for the manufacture of cans for fruit, fish and vegetables by machine processes exclusively, prominent among which is that of Messrs. Norton Bros., of Chicago, in which the success of the "Howe" machine has been fully demonstrated.

The operation of the machine may be briefly described as follows: The operator places the body and one end of a can be-

was said that, to illustrate his abilities in the building line, he laid the foundation of a house in the morning and in the evening of the same day turned it over to the owners complete in every particular. Birmingham is a wonderful place and doubtless most of those who read this statement thought it was either a wonderful yarn, or else that the house was simply a few boards thrown together. A visit to Birmingham some days ago gave the writer the chance to see Mr. Beaumont, and learn something of his remarkable building operations. About one month ago the Elyton Land Co. contracted with him to build a frame hotel up on the Highlands, to be completed within 30 days from the time work was commenced. On the 27th day, when the writer was there, the entire building was nearly done, and Mr. Beaumont expected to turn it over finished from top to bottom, painted inside and out, and every room papered by the 29th. This hotel is several hundred feet long, has 138 rooms, and is capable of accommodating about 250 guests. It is of very attractive design, and at once strikes the visitor as a most charming house. Two immense verandahs extend entirely around it. Its con-

temperature winter and summer, varying but a few degrees throughout the year.

It is, we believe, a good thing for the entire South that Mr. Beaumont has turned his attention this way, and it is possible that most of his time will in the future be devoted to building operations in this section. There is need for just such push and vim, and especially for such in the construction of dwellings in the industrial centers of the South. There is hardly a growing town in the South where dwellings are not badly needed. In Anniston hundreds of dwellings could be rented or sold just as soon as completed. In Decatur the same is true, notwithstanding the vigorous efforts of the people there to get enough dwellings up, and in Birmingham, although 2,500 houses are said to be under construction, we have been informed that thousands of people have been and are being turned away simply because they cannot secure a house in which to live. While at present located at Birmingham, Mr. Beaumont is negotiating for the building of many houses in other growing Southern towns.

If you wish to keep posted on the progress of the South, read the *MANUFACTURERS' RECORD*. Price \$3.00 a year.

crystallize into such co-operative action as may result in vast benefits to the South in the development of her wonderful resources.

Such a general Southern bureau, organized for the sole purpose of making known the advantages and resources of the South, might be composed of land and improvement companies, mining and other industrial corporations; also chambers of commerce, boards of trade, manufacturers' associations, State, county and municipal governments might be admitted to membership. The whole constituting a strong Southern bureau with headquarters centrally located. Such bureau, operating under wisely-provided by-laws, preparing and distributing suitable descriptive printed matter, seeking and answering correspondence, traveling intelligent emissaries throughout the North and East and in foreign countries, and co-operating justly with its individual members in all proper efforts to increase the material prosperity of the South, would be a power, the results of which would be irresistible.

Who, representing such corporations officially, will speak in favor of calling a meeting of such official representatives at an early date for the purpose of considering the question of effecting such organization?

The writer of this letter will be responsible for providing suitable accommodation for such a Southern industrial convention at any time if it should be called to meet in the city of Atlanta.

M. M. W.

[CONTINUED FROM PAGE 711.]

Chattanooga.—D. J. Chandler has received the contract to erect 8 three-story buildings on Eighth street for T. G. Montague.

Chattanooga.—The Chattanooga Coffin & Casket Co., previously reported, have organized with J. F. Loomis as president; J. C. Vance, vice-president; E. R. Betterton, secretary and treasurer, and C. W. Lyon, manager. Are selecting a site for their factory.

Chattanooga.—F. W. Dages, of Gallipolis, O., is prospecting, it is said, with a view to moving his factory to some point in the South.

Chattanooga.—The East Tennessee Manufacturing Co., capital stock \$100,000, has been formed to establish a planing mill, brick works, &c.

Chattanooga.—A. L. Griffith, of Jasper, is trying to organize a company to manufacture rotary engines.

Columbia.—It is probable that a stock company will be formed to start a factory for manufacturing the Seaton spring double-tree. Seavy & Cason can give information.

Columbia.—A company is being formed to bore for natural gas. J. T. Craik can probably give information.

Columbia.—A carriage and buggy factory have been started by Cox & Martin.

Erin.—William E. Cooley and others are organizing a company to develop cement rock quarries.

Germantown.—Kimbrough & Trigg, whose saw and grist mill and gin were lately reported as burned, will rebuild.

Greenville.—A knitting factory will be established by J. A. Galbraith & Son.

Island Mills.—Joseph Rader has leased his iron ore mine to parties who will develop.

Jackson.—The Calliopen Society will erect a \$5,000 hall.

Johnson City.—Oliver Cure will erect a planing mill and sash and door factory.

Kingston.—A silver and lead mine is being developed by W. C. Turner.

Knoxville.—P. Kern, L. H. Hamilton, S. B. Luttrell, L. A. Gratz and H. Schubert have chartered a company to build a street railroad.

Knoxville.—The Scates Warm Air Furnace Co., previously reported, have organized with W. P. Washburn as president; J. R. Butt, vice-president, and T. W. Keller, secretary and treasurer. The capital stock is \$75,000. The company will build works at once.

Knoxville.—It is probable that a spoke and handle factory will be moved from Bloomington, Ind., to Knoxville. Secretary Chamber of Commerce can give information.

Knoxville.—The Knoxville Petroleum & Gas Co. will bore a well at once. C. A. Frame and N. T. Cooper are interested in the company.

Maryville.—W. T. Parham contemplates putting roller machinery in his flour mill.

Memphis.—Large wood-working establishments are to be erected on the lands of the Chickasaw Land Co., near Memphis.

Morells' Mills.—It is reported that the Foust mine will be developed.

Mulberry.—The flour mill of J. B. Thomson is receiving an outfit of roller machinery.

Ooltewah.—Brick works have been established by J. D. Keener.

Ripley.—The flour mill of McKinney, Neal & Johnson is being refitted with roller machinery. The capacity will be 100 barrels daily.

Shelbyville.—The Shelbyville Natural Gas & Oil Co., previously reported, have organized with J. C. Aken as president; John D. Wilhoite, vice-president; R. H. Lewis, secretary and general manager, and S. J. Walling, Jr., treasurer.

Sparta.—The Southern Queen Mining & Prospecting Co., of Georgia, have leased the marble and stone quarries of Sperry & Marchbanks. The company also will bore for oil.

Sparta.—The "Cataract Mill" is to be refitted with new roller flour machinery.

Wartrace.—It is reported the Nashville, Chattanooga & St. Louis Railroad Co. (office, Nashville,) will move their shops to Wartrace.

TEXAS.

Anson.—A grist mill and cotton gin are reported to be erected. D. M. Jones can probably give information.

Bastrop.—The Kansas City Bridge Co., Kansas City, Mo., have received the contract to build 5 bridges, and the King Iron Bridge & Manufacturing Co., Cleveland, O., the contract to build one bridge. The six will cost \$15,079.

Bowie.—The Bowie Flour Mills will be overhauled and improved.

Bowie.—The city council are advertising for bids for drilling an artesian well.

Brenham.—The Brenham Oil Mills are to be improved and greatly enlarged.

Burnet.—Messrs. Shannon and Edman are erecting steam granite works.

Burnet.—The Texas Mining & Improvement Co., capital stock \$1,000,000, has been formed to develop mineral lands, etc.

Clevisas.—A. W. Morris is rebuilding his large saw mill, previously reported as burned.

Corsicana.—A company has been formed, with W. N. Kenner, J. R. Payne, G. W. Prewitt, James Kerr, Sr., and J. S. Gibson as directors, to build a cotton factory. The capital stock will not be less than \$100,000.

Cross Plains.—R. P. Derington contemplates erecting a flour mill.

Dallas.—J. F. Hinckley, chief engineer, will receive proposals until June 15, for building pile and frame trestles on the Fort Worth extension (100 miles) of the St. Louis, Arkansas & Texas Railroad.

Dallas.—The Young Men's Hebrew Society will erect a 3-story building to cost \$18,000.

Dallas.—General Mumford, of St. Louis, Mo., and associates will organize a construction company, to build the railroad of the Dallas & Archer Coal & Iron Railway Co., previously reported.

Dallas.—Aultman, Miller & Co., of Akron, O., will probably erect a large building.

Dallas.—The Nunnely Gold & Silver Mining Co., recently reported as incorporated, will purchase a plant of mining and smelting machinery.

Dallas.—W. L. Williams will erect a \$7,000 building.

Duffau.—A \$20,000 roller flour mill is reported to be erected. The Duffau Co-operative Association can probably give particulars.

El Paso.—The Rich Hill, Arkansas City & El Paso Railway Co. has been chartered at Topeka, Kan., to build a railroad from Rich Hill, Mo., to El Paso. The capital stock is \$100,000.

Fort Worth.—A company will probably be formed to furnish Fort Worth with water power for factories.

Fort Worth.—There are prospects of a wool-scouring establishment being erected.

Fort Worth.—The Atchinson, Topeka & Santa Fe Railroad Co., (office, Topeka, Kan.,) have purchased a site for their machine shops, and will, it is said, soon begin work.

Fort Worth.—W. A. Huffman will erect a large 3-story brick and iron building.

Gainesville.—The Gainesville Compress & Forwarding Co., previously reported, have contracted for the erection of their compress, with George Taylor & Co., of Ennis.

Galveston.—J. J. Schott, R. Volcker and J. B. Turnley have incorporated the J. J.

Schott Manufacturing Co., capital stock \$500,000.

Galveston.—The Taylor Compress Co., lately reported as building a cotton warehouse, will put in a large cotton compress.

Granbury.—An ice factory is reported to be built. J. D. Ballard can probably give particulars.

Lampasas.—The mayor will receive bids until June 15 for furnishing and laying about 3,000 feet of cast iron water pipes.

Lampasas.—It is stated that arrangements have been made for the erection of a cotton and woolen mill.

Marble Falls.—The name of the company who will erect the cotton and woolen mill reported last week, is the Marble Falls Manufacturing Alliance. S. E. Holland is president, and J. A. Ramsdell, secretary. The company has purchased the Marble Falls property for \$100,000, and will probably start other manufactories.

Marlin.—L. B. Chilton and others will bore an artesian well.

Marshall.—Surveys are being made for the water works previously reported, and bids for their construction will shortly be advertised for. R. T. Hailey can give particulars.

Masterville.—It is reported that D. C. Summer & Co. are converting their flour mill into a roller mill, with a capacity of 125 barrels daily.

McKinney.—The Farmers' Alliance contemplates building a flour mill and elevator.

Midland.—The Midland Town Co. has been organized, with L. L. Keller as president; J. W. Hayes, secretary, and R. H. Zeane, treasurer.

Morgan.—The Morgan Water Works & Ice Co. has been formed. Will begin work at once.

San Antonio.—A company is being formed to build a hall, to cost not less than \$60,000.

Santa Anna.—Coal mines are being developed by the Harrison Mining Co.

Santa Anna.—William Annesser is building the large flour mill previously reported.

Sherman.—The St. Louis, Arkansas & Texas Railroad Co., (office, St. Louis, Mo.,) have purchased 123 acres of land.

Sherman.—Britton & Lyon have received the contract to grade a railroad.

Waco.—Efforts are being made to organize a company to erect an electric light plant.

Waxahachie.—A company is being formed to erect a cotton compress. E. C. Huckabee can probably give information.

Whitewright.—A stock company is being organized to build a 75 barrel roller flour mill. A. L. McCampbell can probably give information.

VIRGINIA.

Abingdon.—The Abingdon Coal & Iron Railroad Co., previously reported, has been organized with George W. Palmer, of Saltville, as president, and R. N. Page, secretary and treasurer. The company will build a railroad from Mendota, Tenn., to Damascus, Va.

Berkley.—It is reported that an effort is being made to organize a company to erect a nail factory.

Berkley.—White & Francis has started a spring bed factory.

Claremont.—J. Frank Mancha and others will erect a bank building.

Clarksville.—A tobacco factory has been erected by Kasey, Wade & Co.

Covington.—McAllister & Bell, millers, have purchased some new machinery.

Coyner's Springs.—Zinc and silver mines are being developed by Northern parties. J. H. Riley can probably give information.

Dublin.—Water works are being constructed. John W. Lyons can probably give particulars.

Elkton.—H. A. Kite has purchased some new machinery for his flour mill.

Lee.—Joseph R. Anderson, Jr., is erecting a keg factory. The daily capacity will be from 1,200 to 1,500 nail kegs.

Lovely Mount.—The Radford Improvement Co., previously reported, will, it is said, soon build gas and water works.

Nokesville.—James Keiuit will erect the flour mill reported last week.

Pedlar Mills.—A canning factory will soon be erected.

Pocahontas.—J. H. Wilhelm has the contract to build coke ovens for Booth & Co., Freeman & Jones, and others.

Portsmouth.—The Portsmouth Electric Light Co., previously reported, have commenced work on their plant.

Raphine.—James E. A. Gibbs has purchased the machinery for his grain elevator.

Richmond.—The Vulcan Iron Co. has been incorporated to enlarge the Vulcan Iron Works and add a rolling mill, with T. Seddon Bruce as president, and Philip A. Bruce, secretary and treasurer. The capital stock is to be not less than \$100,000 nor more than \$200,000.

Rural Retreat.—It is reported that the Lobdell Car Wheel Co., Wilmington, Del., will change their White Rock furnace from a cold blast to a hot blast furnace and enlarge it.

Sedalia.—W. R. Cornelius has bought some new machinery to improve his flour mill.

Timothy.—Jacob Hoffman is adding some new machinery to his flour mill.

West Point.—The Richmond & West Point Land, Navigation & Improvement Co., previously reported as incorporated, contemplates erecting a large cotton compress and a hotel. The capital stock is \$400,000. T. M. Logan, of Richmond, is interested.

Woodstock.—Flour mill machinery has been purchased by J. I. Triplett.

WEST VIRGINIA.

Alderson.—Ward & Sweeney have purchased steam-power for their brick works. They have the contract to furnish the Newport News & Mississippi Valley Railroad Co. with 4,000,000 brick.

Buckeye.—W. H. McClintic has purchased machinery for a flour mill.

Charleston.—The Kanawha & Ohio Railroad Co. have received permit to erect a frame machine shop.

Parkersburg.—The capital stock of the Consumers Coal & Mining Co., reported last week as chartered to mine coal and manufacture coke, is not to exceed \$100,000.

Point Pleasant.—It is rumored that the Kanawha & Ohio Railroad Co. (office, Charleston) will build large machine shops.

Wheeling.—Ralph Spears, T. W. Phinney and A. D. Howell have formed the Standard Axle Co., and will enlarge the axle works of R. Spears.

Wheeling.—W. B. Schiller, of Youngstown, O., and C. D. Hubbard, J. N. Vance, W. F. Stifel and Frank J. Hearne, of Wheeling, have organized the Bessemer Limestone Co., to mine limestone and other minerals, and manufacture lime, coke, &c. The subscribed capital stock is \$5,000.

BURNED.

Baltimore, Md.—The drying establishment of the Baltimore Sheep Butchers & Wool Pulling Association, on Brunt street.

Brewton, Ala.—The drying kiln of Blacksher Bros.; loss \$6,000. Will be rebuilt.

Charleston, S. C.—The works of the Etewan Phosphate Co., damaged by a boiler explosion.

Edgefield, S. C.—The saw mill of O. O. Babb, near Edgefield.

Lovelady, N. C.—The saw mill of J. P. Icard & Co.

Madison, Ark.—The steam saw mill of H. Binn. Will be rebuilt.

New Orleans, La.—The trunk factory of A. Enswinger.

New Orleans, La.—The Parisian Shirt Factory of F. Gueble.

Petersburg, Va.—The tobacco factory of Payne Bros.; loss \$3,000.

Thibodaux, La.—The iron foundry of Thomas Jeffries; loss \$8,000.

Extending Water Works.

SOUTH PITTSBURG, TENN., May 31, 1887.
Editor Manufacturers' Record:

We are enlarging our reservoir and have increased our supply of spring water to nearly double. We are putting down 5,000 feet of new water mains.

SOUTH PITTSBURG CITY CO.,
G. C. CONNOR, Secty.

CUMBERLAND, MD., June 2, 1887.
Editor Manufacturers' Record:

I, with others, have been manufacturing lumber at St. Albans, W. Va., for some time past, and have added more capital and organized under the name of the Potomac Lumber Co.

J. WILSON HUMBRID.

Will Rebuild Mill.

GERMANTOWN, TENN., May 31, 1887.
Editor Manufacturers' Record:

We expect to rebuild our cotton gin and saw mill.

KIMBRAUGH & TUGGLE.

ANNISTON, ALA., June 1, 1887.
Editor Manufacturers' Record:

I have started a mattress factory, and a little later will make bed springs.

J. M. ANDERSON.

COLUMBUS, GA., May 30, 1887.
Editor Manufacturers' Record:

The city will erect this year a new building for boys' department of the public school at cost of \$16,000.

CLIFF. B. GRIMES.

CHARLESTON, S. C., June 4, 1887.
Editor Manufacturers' Record:

We will replace damaged boiler and building at once, and will be in full working order in the course of two or three weeks.

ETIWAN PHOSPHATE CO.

Will Build a Hotel.

BRISTOL, TENN., June 4, 1887.
Editor Manufacturers' Record:

Mr. W. R. Onkley will build a hotel here. It will be four stories high and will cost \$47,000.

W. V. STACK.

MOSS POINT, MISS., June 3, 1887.
Editor Manufacturers' Record:

The firm of Denny & Hunt have purchased a Cole locomotive, to be used on a pole road, now under construction, for the purpose of hauling saw logs from timbered lands to the Pascagoula river, from which point they can be floated at any stage of water to the mills.

DENNY & HUNT.

PULASKI CITY, VA., June 1, 1887.
Editor Manufacturers' Record:

The object of this company is to sell real estate; to erect water works and gas works. The president is G. V. Litchfield.

LAKE SPRING LAND & IMP. CO.,
D. I. PEIRCE.

Will Build Flour Mill.

NOKESVILLE, VA., June 2, 1887.
Editor Manufacturers' Record:

Jas. Keiuit will start a flour mill if he can get a 35 horse-power engine.

L. A. MARSTELLER.

Will Erect Large Smelting Works.

NUEVO LAREDO, MEX., June 6, 1887.
Editor Manufacturers' Record:

It is our intention to erect at once at Laredo, Texas, one 40-ton smelter, for smelting silver-lead ores, and expect within 12 months to increase the plant to 3 stacks of the same size, together with 300-ton concentrating plant. The entire plant, when completed, will cost about \$225,000.

GAUDALUPE MINING CO.
JAMES BAXTER, Gen. Man.

Cotton-Seed Oil Mill.

AMERICUS, GA., May 31, 1887.
Editor Manufacturers' Record:

The Americus Guano Co. was organized, with a capital paid in of \$25,000. Jno. M. Green, Atlanta, president; H. C. Bayley, Americus, secretary and treasurer, and R. F. Sanes, manager. Contract is let for machinery for cotton-seed oil mill and the manufacture of guano. Will be in operation by 1st September next. Capacity 3,000 tons.

H. C. BAYLEY, Secty. & Treas.

To Build a Dummy Railroad.

NASHVILLE, TENN., June 1, 1887.
Editor Manufacturers' Record:

I and associates have obtained a charter to build and operate a dummy railroad from the Public Square running northwest from starting point to the new town of West Nashville, some 3½ miles, and have asked the city council of Nashville for the right of way. As soon as we get this we will commence active work.

E. T. HOLMAN.

BERKLEY, VA., June 3, 1887.
Editor Manufacturers' Record:

We have started a spring bed factory.

WHITE & FRANCIS.

HOT SPRINGS, ARK., June 3, 1887.
Editor Manufacturers' Record:

We have written to get prices on four furnaces, which we will purchase on starting our furnaces here.

PHOENIX MINING CO.
C. F. DRAKE, Supt.

PINE BLUFF, ARK., June 2, 1887.
Editor Manufacturers' Record:

Have just let the contract for a two-story, 52x120 feet, brick and iron building, to cost in the neighborhood of \$8,000. Lower floor to be used for business houses and upper for office of Pine Bluff Press-Eagle.

ARTHUR MURRAY.

HOT SPRINGS, ARK., June 2, 1887.
Editor Manufacturers' Record:

This company is making preparations for the erection of a round-house.

HOT SPRINGS R. R. CO.

BALTIMORE, MD., June 3, 1887.
Editor Manufacturers' Record:

The Zell Engineering Co., of New York, will build works to manufacture Zell boilers in either Newark, N. J., or Baltimore. If we can get \$50,000 subscribed to stock will come to Baltimore.

ROBERT R. ZELL, Treas.

Will Add New Machinery.

CALERA, ALA., June 4, 1887.
Editor Manufacturers' Record:

Are going to add new machinery.

CALERA BRICK WORKS.

NEW ORLEANS, LA., June 2, 1887.
Editor Manufacturers' Record:

Our wagon factory was burned out on the 4th of May, and we had a total loss with no insurance. Business will be resumed by Thos. O'Connor, Sr.

THOS. O'CONNOR & SONS.

Will Build \$25,000 Roundhouse.

HOUSTON, TEX., May 31, 1887.
Editor Manufacturers' Record:

This company, Houston & Texas Central R. R. Co., will build a 24-stall roundhouse at Houston of galvanized corrugated iron to cost about \$25,000.

H. H. SWANSON, G. T. M.

ORMOND, FLA., May 30, 1887.
Editor Manufacturers' Record:

There will be a wooden bridge built across the river, 3,000 feet, and a hotel costing from \$20,000 to \$30,000, this summer and fall. Probably the hotel will be built by a stock company, John Anderson, manager.

P.

AUGUSTA, GA., June 4, 1887.
Editor Manufacturers' Record:

The Graniteville Manufacturing Co., Graniteville, S. C., are now putting automatic sprinklers in their Vaulcuse and Graniteville Mills, and building large warehouses at both mills.

H. H. HICKMAN, Pres.

Steam Heating Plant to be Erected.

BALTIMORE, MD., June 3, 1887.
Editor Manufacturers' Record:

Arrangements are made so that a steam heating company will go into operation in Baltimore city as soon as we get some preliminary matters settled. We are putting in a plant at Newark, N. J., and the Baltimore plant will be the next one.

ROBT. R. ZELL, 112 Liberty st., New York.

To Manufacture Lime and Cement.

ATLANTA, GA., May 31, 1887.
Editor Manufacturers' Record:

This company has been chartered with a capital stock of \$10,000, with privilege of increasing to \$50,000. It will manufacture limes and cements of all kinds. Its works will be at several places in this State, but its principal office and mills will be in Atlanta, Ga. It has two kilns now at Davittes, Ga., on E. & W. R. R.

ATLANTA LIME & CEMENT CO.
J. A. BURNS, Pres.

ALTANTA, GA., May 27, 1887.
Editor Manufacturers' Record:

This company has been awarded the contract for the erection of the new building for the First National Bank of Sheffield, Ala., and has already commenced work. The building complete will cost about \$35,000.

ATLANTA CONSTRUCTION CO.
J. A. BURNS, Secy.

Mineral and Oil Lands to be Developed.

DANVILLE, ALA., June 1, 1887.
Editor Manufacturers' Record:

We have just completed the organization of the Danville (Ala.) Asphalt, Oil & Mining Co. by electing Saml. Blackwell as president; N. A. Burret, vice-president; L. P. Troup, secretary, and J. M. Kitchens, treasurer. The authorized capital is \$100,000, 50 per cent. of which has been subscribed and 20 per cent. paid in. We hope to begin developing our property very soon, which consists of between 8,000 and 10,000 acres of mineral and oil lands.

SAML. BLACKWELL.

CHATTANOOGA, TENN., June 3, 1887.
Editor Manufacturers' Record:

The firm of Lewis & Shelton have bought the candy equipments of Suman & Albert, and are contemplating on starting up a large candy factory in a short while. Necessary arrangements are being made now for work.

LEWIS & SHELTON.

Large Lumber Mills to be Built.

BRONSON, FLA., June 4, 1887.
Editor Manufacturers' Record:

On May 25 I sold to a syndicate of Michigan capitalists some 38,000 acres of land, in a body, in the central part of this (Levy) county. They propose erecting extensive mills by next November. The plant will cost them \$45,000 to \$50,000. It will be the largest and best appointed mill, probably, in Florida. Their purchase covers as fine a body of cypress, pine, oak, gum and ash timber as there is in the State. We are also organizing a company with \$200,000 capital to develop the iron interest of this section. Some of the best deposits of iron ore to be found are in this county. The ore is soft, elastic, and the finest known for making Bessemer steel. The deposit is extensive. The company has secured the lands and the preliminary work of forming the company has been done.

J. V. BURKE.

Building New Factory.

CHATTANOOGA, TENN., May 30, 1887.
Editor Manufacturers' Record:

We have in process of construction and which we hope to complete and occupy by July 1st, a new factory, 40 by 60 feet, 2 stories high. We shall put in new engine and boiler of 15 horse-power capacity, tempering furnace and all other machinery necessary for the manufacture of our springs. The whole to cost, exclusive of ground, when completed something less than \$3,000. There are parties here now trying to get up a stock company to start a wagon factory on a large scale and it is quite probable they will succeed.

VEHICLE SPRING CO.,
THOS. S. KING, Secty.

Extending Railroad.

SANFORD, FLA., May 29, 1887.
Editor Manufacturers' Record:

Louis McLain has been awarded contract by the Plant Investment Co. to build the Deepwater extension of the S. F. R. R. from Tampa to Black's Point, on old Tampa Bay, where 30 feet of water is found. The work when complete will involve the bridging of Hillsborough river near Tampa, and the building of extensive docks and piers for the handling of the West India business. The work is to be started at once and pushed to early completion.

A.

Erecting Saw and Planing Mills.

GREENSBORO, N. C., June 4, 1887.
Editor Manufacturers' Record:

A. C. Burgess & Co., Staley, N. C., are erecting saw and planing mills for the purpose of cutting oak, walnut and poplar lumber; also shuttle blocks and other hard woods.

The Naomi Falls Manufacturing Co., Randleman, N. C., are putting in another large boiler, made by Tanner & Delaney Engine Co., for their plaid mills.

The Enterprise Manufacturing Co., Coleridge, N. C., are putting additional machinery in their cotton mills.

W. R. BURGESS.

CUMBERLAND, MD., June 6, 1887.
Editor Manufacturers' Record:

The principal object of the Flintstone Land & Mining Co. is to open up the mineral resources of Western Maryland, such as iron, coal, cement, fire clay, potters' clay, glass sand, marble, limestone and building stone, all of which are known to exist here in large quantities and of excellent quality. Some very good leads of silver, lead and plumbago have also been discovered. The company does not prefer to work mines and quarries, but simply to acquire mineral rights and lands, open them up, and then sell or lease to other parties.

F. LAING, JR., President.

MINING NOTES.

By T. K. BRUNER, Raleigh, N. C.

AT BLUE WING.

The cupriferous rocks at Blue Wing, in the northwestern portion of Granville county, are beginning to attract the attention of prominent men from all parts of the country to that section. The miners are kept busy prospecting and they seem to be rewarded for the search. Mr. D. C. Gingerick, of Oak Hall, Pa., spent some time there recently with Mr. C. W. Edgumbe, and was very much pleased with what he saw. Prof. G. B. Hanna, of Charlotte, N. C., has also spent some time there this year, studying the geology of the region. His report will be incorporated in the second volume of the Geology of North Carolina, to be issued by the department of agriculture some time this year. Dr. W. P. Lawver, assayer of the mint bureau of the treasury, has determined to make a personal examination of the field, and has accordingly notified Mr. Edgumbe to expect him at an early day. The indications point to some special activity at Blue wing this summer.

The work on the railroad from Clarks-ville, Va., is progressing rapidly, and this fact has contributed to the interest in the Blue Wing district. That road will penetrate the heart of the territory.

TALC, MARBLE AND LIME.

How little is really known of the vast area in the tramontane section of North Carolina where these stones abound in inexhaustible quantity! The whole section embracing the counties of Cherokee, Clay, Macon, Jackson, Graham, Swain and Haywood, making a territory of no less than 3,910 square miles, has in it formations of the finest kinds of talc, marble and serpentine to be found anywhere in this country. Every few days some new locality is reported. But little systematic work is being done, which in large part is due to the inaccessibility of the district. The Ducktown branch of the Western N. C. Railroad has opened this region in part, and has led to all the development so far attained.

THE NORTH CAROLINA TALC & MARBLE CO., with headquarters at Jarrett's, in Swain county, are doing some systematic work. Mr. W. S. Thomas, is superintending the operations of the company and reports that they are expecting a large business in talc this summer. Already a number of orders have been received, and they are filled as rapidly as the material can be blasted from the ledge which overhangs the Western Railroad. This is not only convenient, but a very economical situation. He also states that the demand for talc is increasing to such an extent as to demand the building of mills for grinding the material on the spot. They also contemplate putting in machinery for cutting out the fine marble on

the property. They have recently found a vein of flesh-colored marble on their property which they regard as the finest of its kind in the United States. It is almost as fine as the so-called Mexican onyx in texture, and has a beautiful appearance when polished. The stone is susceptible of high polish. They also have a pure black marble which takes a fine polish, and has no superior for fine indoor decoration. These marbles occur in practically inexhaustible masses. It cannot be long before this whole region must become active in supplying these valuable stones to the world.

IN GEORGIA,

just south of this district, and but comparatively few miles, all is activity in the marble quarries. There are no less than four large establishments running constantly, using a total of twenty-nine gangs of saws. More saws are to be added soon, and it is said that these marble cutters are all far behind with their orders.

Mention need not be made of the well-known marble business in Tennessee, just across our western border. All this goes to show that it only needs railroad facilities to open up this immense field to the world.

The people of that section are looking to the improvement of the present facilities of the Western North Carolina Railroad, and to the Marietta & Georgia Railroad to bring them into better communication with the great centers of trade where they can find sale for these stones.

BRIERTOWN MINE.

A fine quartz lode has been discovered on the property of Capt. Forster, who lives about five miles from Jarrett's. It is said to be highly auriferous, and has attracted the attention of a number of mining men who have been examining it. It is pronounced to be of a sufficient grade, with surface indications pointing to size and continuity of the deposit, which will entitle the place to deeper exploration. Free gold is easily shown in the prospector's pan.

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A concise treatise on Steam and General Machinery. Also Practical Tests on Electric Lighting. 172 pp. Second edition, revised and improved. **Mailed on Receipt of \$1.00.**

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I offer for exchange **\$9,000** acres of patented Texas lands for hardware. Lands admirably selected and located. Address,

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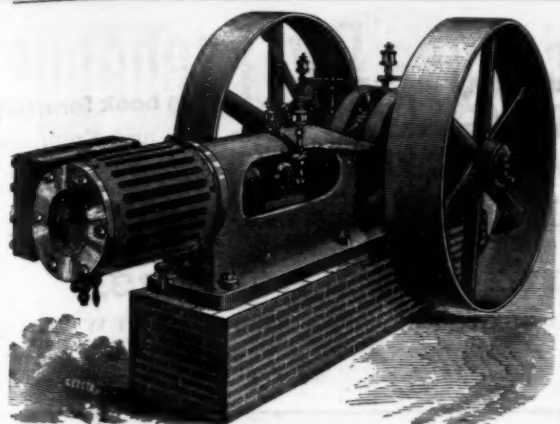
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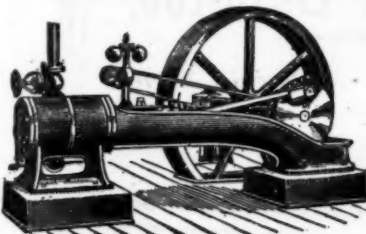
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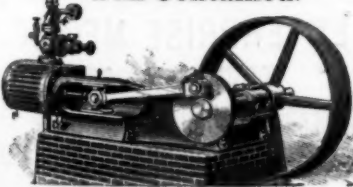
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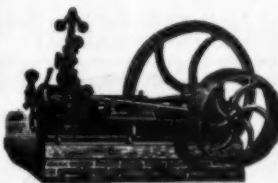
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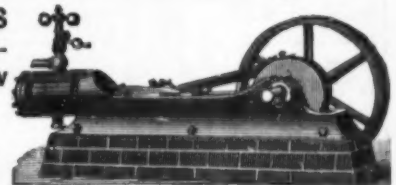
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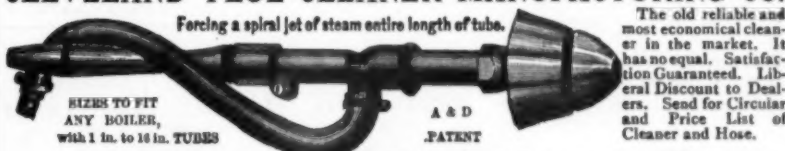
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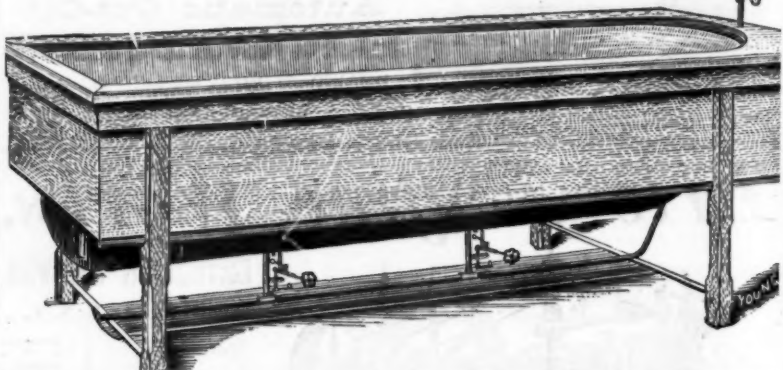
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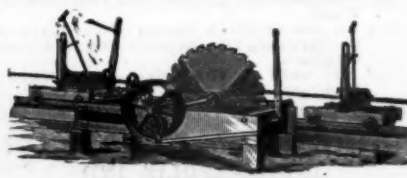
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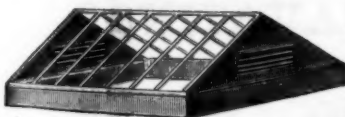


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Fig. 2.



Fig. 3.



Fig. 4.



Fig. 5.

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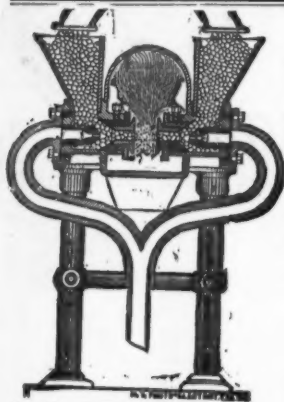
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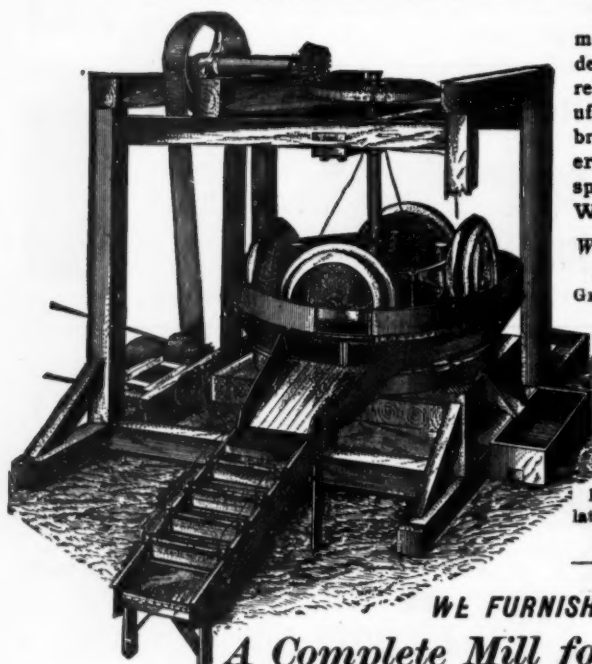
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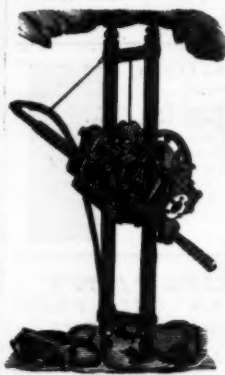
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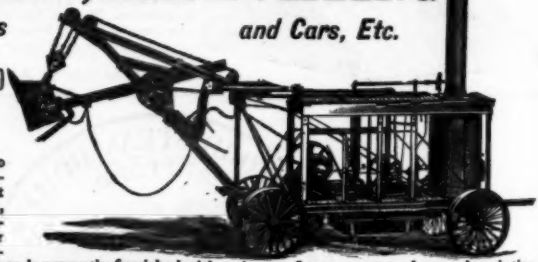
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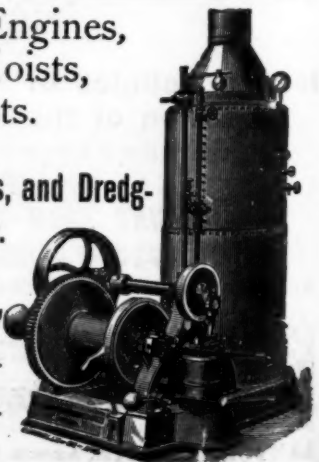
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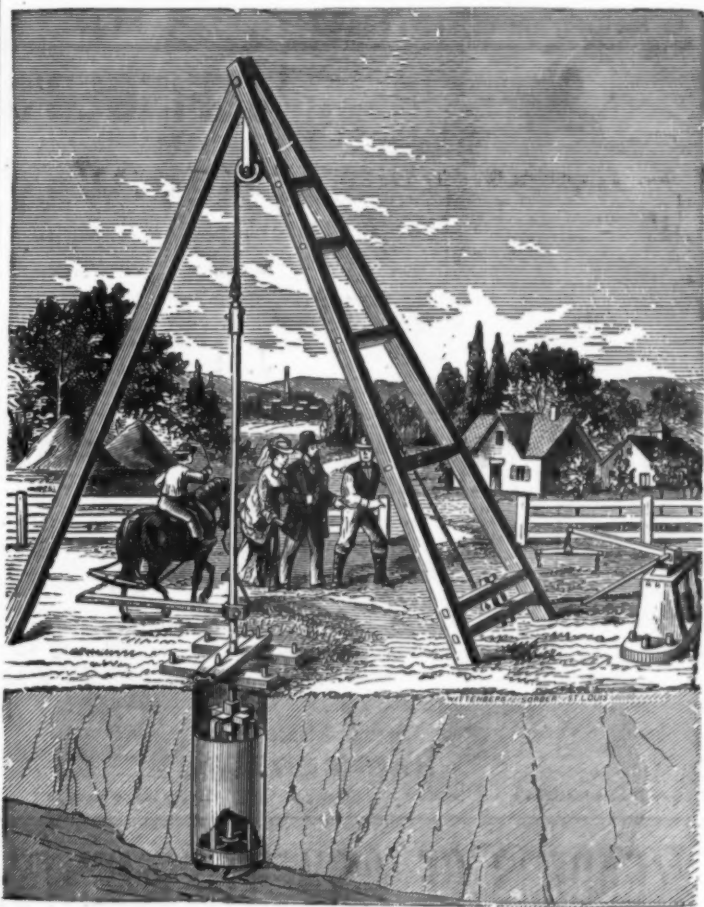
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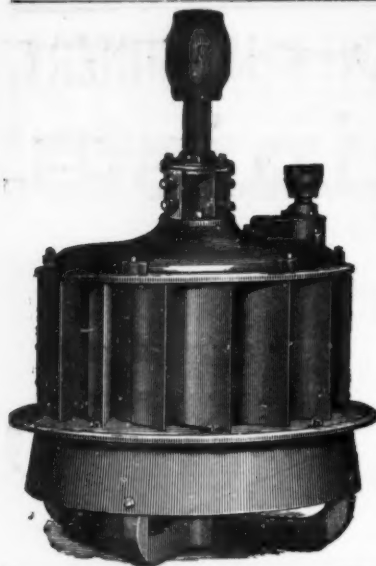
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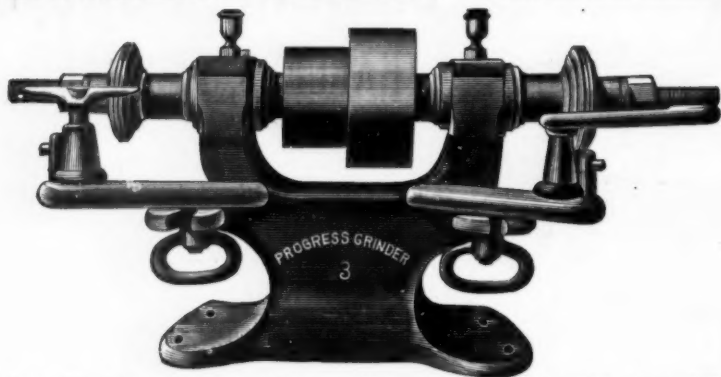
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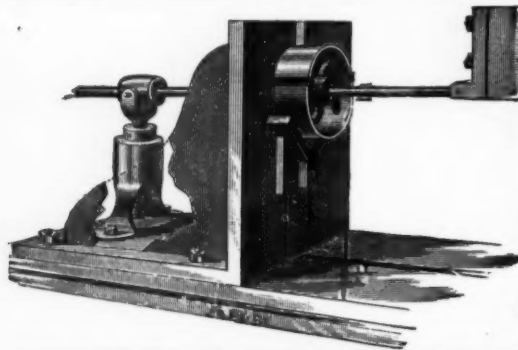


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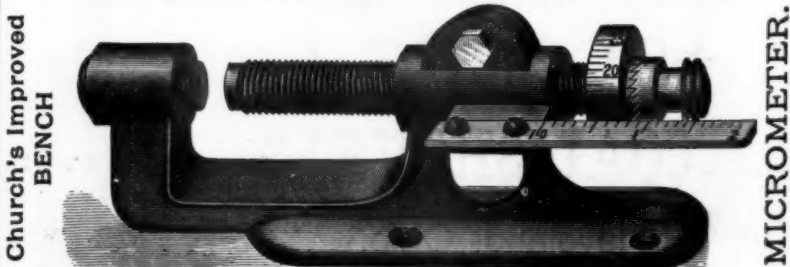
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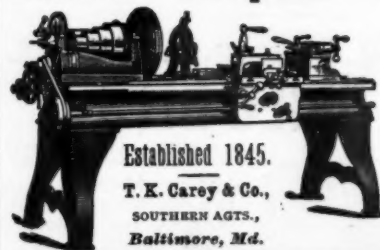


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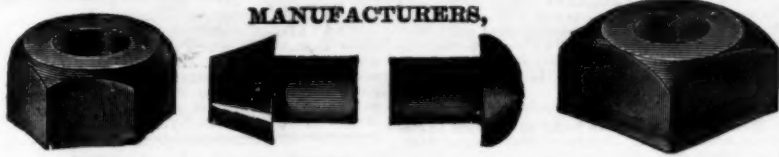
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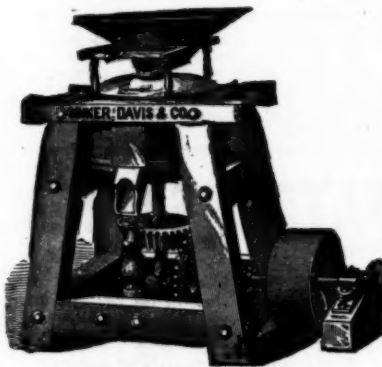
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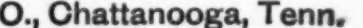
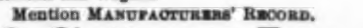
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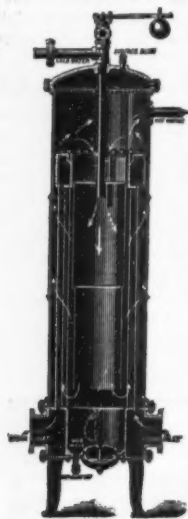
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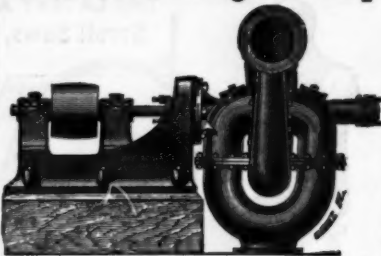
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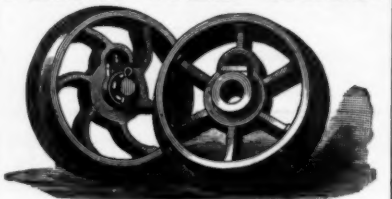


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WANTED.—A thoroughly competent mechanic to take the management of a sash, door and blind factory situated on railroad and in the center of long leaf yellow pine timber. Prefer party who would take small interest in company. Factory will be replete with latest improved machinery. Address Talladega Land & Improvement Co., Talladega, Ala.

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WANTED.—A practical pattern maker, capable of making ordinary drawings, with some experience in millwrighting and machine work; also, a practical man capable of selling and erecting wind-mills. Address, Progress Engine & Machine Works, Summerfield, Baltimore county, Md.

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A PARTNER WANTED with \$5,000 to \$10,000 capital to assist in carrying on the business of a first-class machine shop, with good business prospects, located in Atlanta, Ga. Address all inquiries to Box 297, Atlanta, Ga.

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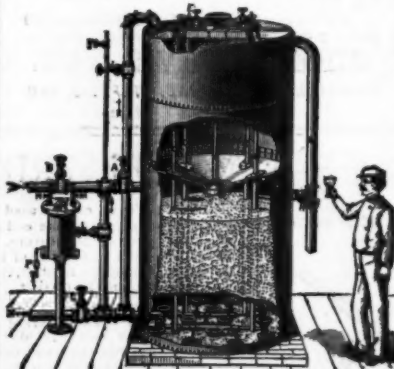
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DECATUR

— THE — GATEWAY OF ALABAMA.

✱ A REVIEW. ✱

The following Enterprises have been located in Decatur, Ala., in the last Three Months :

The Decatur Land, Improvement & Furnace Company was organized on the 11th day of January of the present year. Since that time there have been commenced—

1st. The Charcoal Company's plant, costing \$125,000. Fifty ovens are erected and ready for operation. Employs 200 men.

2d. A 70-ton Charcoal Iron Furnace, costing \$190,000. Gordon, Laurea & Straubel, of Philadelphia, builders. Employs 100 men.

3rd. One 100-ton Blast Iron Furnace, costing \$225,000, by the Decatur Land, Improvement & Furnace Company. Employs 200 men.

4th. The Decatur Iron Bridge & Construction Company, George A. Mooar, of Keokuk, Iowa, president; Mr. Robt. Curtis, of Chicago, vice-president. Cost \$100,000. Employs 150 men.

5th. The American Oak Extract Co., J. E. McCarty, of Barksville, W. Va., president. This is the largest enterprise of the kind in the world. Cost \$65,000. Employs 100 men.

6th. Ivens & Son, of New Orleans, Steam Engines and Iron Working Plant. Building is 280 feet by 100 feet. Cost \$100,000. Employs 100 men.

7th. Morse Cotton Compress, 90-inch, from Steers & Co., of New Orleans. Plant costs \$45,000. Employs 52 men.

8th. N. K. Meade & Co., of Cincinnati, Ohio, mammoth Sash, Door & Blind Factory. Cost \$50,000. Will employ 100 men.

9th. Berthard & Co., of Springfield, Ohio, Sash, Door & Blind Factory, costing \$15,000. Employs 20 men.

10th. Brush Electric Light Co., for a thirty light plant. Cost \$8,000. Employs 5 men.

11th. The Ironton, Ohio, Wheelbarrow Company, costing \$25,000. Employs 50 men.

12th. Inman & Co., of New York City, Water Works System. Cost of plant, \$100,000.

13th. Blymeyer Artificial Ice Company, of Cincinnati, to be in operation June 1st. Cost of Plant, \$10,000.

14th. Three Brick Yards are in operation at this place, one Eureka Dry Press Steam Machine, two Anderson Chief Machines. Cost \$40,000. Men employed, 90.

15th. Decatur Lumber Co., B. E. Poley, Auburn, Ill., manager. Carries 500,000 feet of lumber in stock.

16th. Three hundred and fifty carpenters are engaged in erecting cottages.

17th. Natural Gas Co., A. F. Murray, president; H. G. Bond, of New York, treasurer. Capital stock \$200,000.

18th. First National Bank, capital \$100,000. C. C. Harris, president; W. W. Littlejohn, treasurer.

19th. Second National Bank, capital \$100,000. Judge H. G. Bond, president; W. K. Wilson, of Kansas City, treasurer.

20th. Merchants' Insurance Co., of Decatur; capital \$100,000. J. W. Nelson, of Chicago, president; C. Peacher, of Montgomery, secretary.

21st. Decatur Building Association, capital \$300,000.

✱ Railroad Facilities. ✱

This town lies on the south bank of the Tennessee river, at the junction of the Louisville & Nashville Railroad and the great East Tennessee, Virginia & Georgia system. Thus, it has already an admirable railroad system, her trunk lines running to all cardinal points of the compass. In addition to these great trunk lines of road, the Rome & Decatur Railroad, from Rome, Ga., northwest, to Decatur, is being rapidly built, and will soon be completed.

Charters for two other roads have been obtained, one running southwest to Aberdeen, Miss., to connect with the Illinois Central system, the other running south and west to Selma, Ala., to connect with the Mobile & Ohio at Columbus, Miss.

✱ Decatur is one of the Healthiest Cities in North Alabama. ✱

The Health Officer's report for Morgan County shows that the death rate among the whites in Decatur for the year 1886 was only 11 in 1,000.

THIS IS AS GOOD A REPORT AS ANY TOWN IN THE STATE CAN SHOW.

ESTABLISHED 1852.

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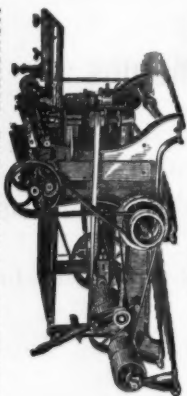
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 "I am running one of your Chisel-Tooth Saws. Have been working in saw mills for past five years, but never found a saw equal to yours. Please send me a catalogue. W. A. Williams.
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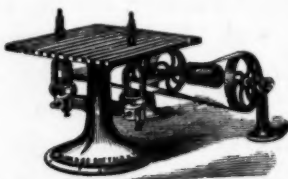
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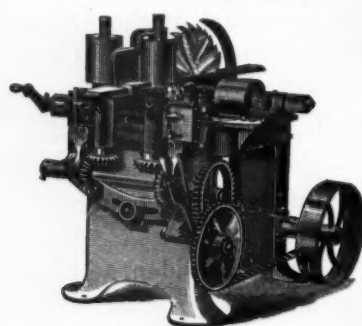
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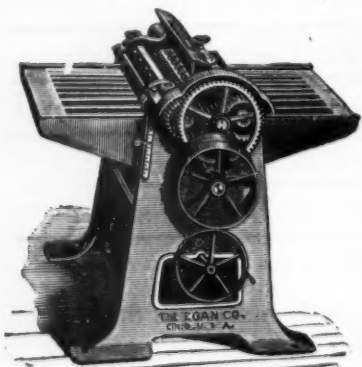
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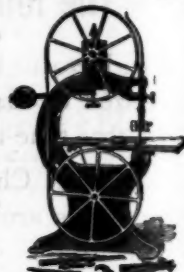
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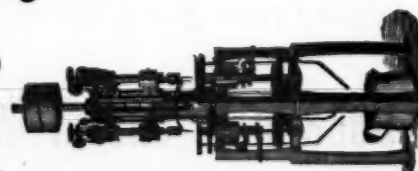
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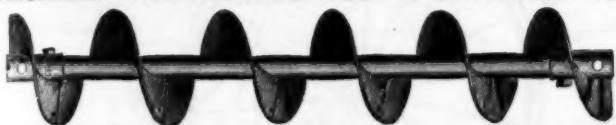
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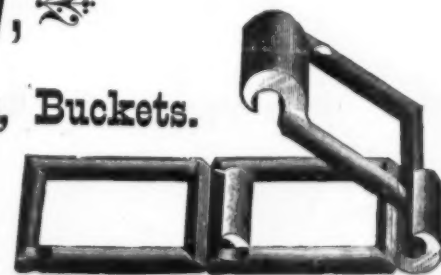
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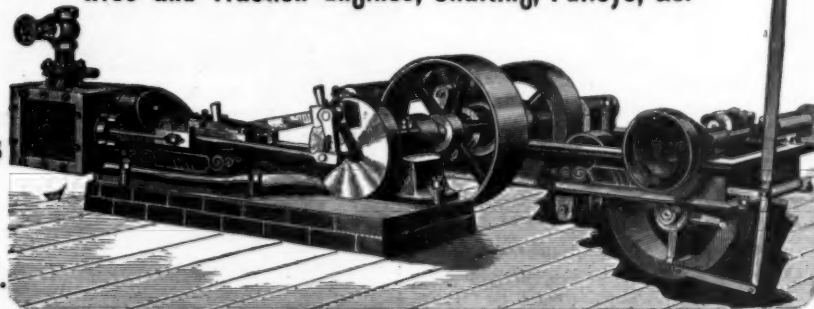
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The protection of life and property from fire is an important matter, which should be especially considered by the rapidly growing towns and cities of the South.

Our modern fire service in large cities has reached a degree of perfection that is a matter of surprise and astonishment to people unacquainted with the fine workings of a system embodying both science and art.

Constant improvements in engines, trucks, hose carriages and a multitude of various fire apparatus and supplies are being made by the leading manufacturers, and the rivalry between them has led to an advanced stage of perfection. Engines are built lighter than ever without sacrificing their strength; are much simpler and less apt to break down or get out of order, and they are finished in the highest style of modern art.

Hose carts have been superseded by hose carriages, light and very strong; and some of the new extension ladders have been wonderfully useful in saving lives from burning buildings.

The largest factory in the world engaged in the construction of fire apparatus is said to be that of the Silsby Manufacturing Co., at Seneca Falls, N. Y., who have been before the public for the past 40 years, and are therefore able to comprehend and supply the wants of the fire service understandingly.

The Silsby steam fire engine has been before the public for over 30 years, and there are at present over 800 of these machines in service.

The duty demanded of a steam fire engine is usually heavy, and its treatment of the most severe character. In those departments where there are few or no facilities for putting the machine in perfect condition after exacting service, and no appropriations

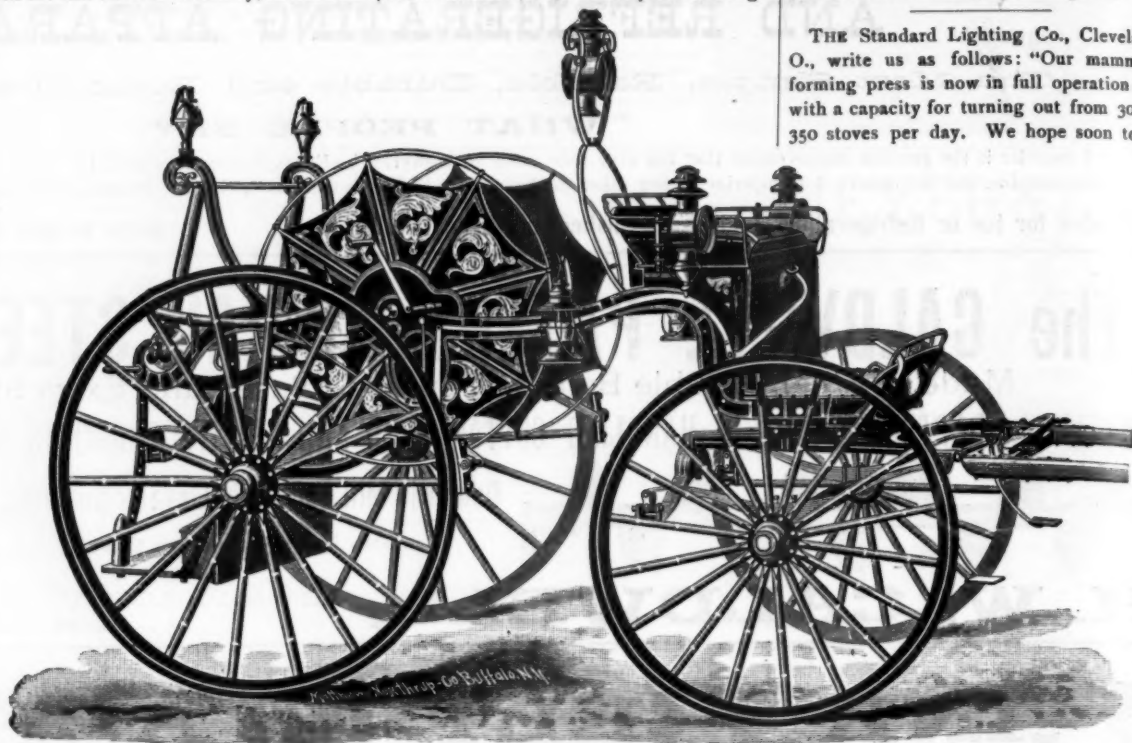
steaming. It combines the good features of both the tubular and the tubulous principles. It is vertical and cylindrical; from the crown sheet depend water tubes having in them concentric circulation tubes, causing in each tube a strong central downward current of water, which, mostly converted into steam, ascends in a thin film in the annular space between the outer tube and the inner or circulation tube. This boiler will raise steam from cold water in four to six minutes; will burn coal or wood; will not foam nor prime; will use salt water if necessary, and the cir-

The Silsby Manufacturing Co. fully guarantee all their machines as regards workmanship, materials, construction, finish and working qualities, and agree to replace at their own expense any parts that may fail on account of defective material and workmanship.

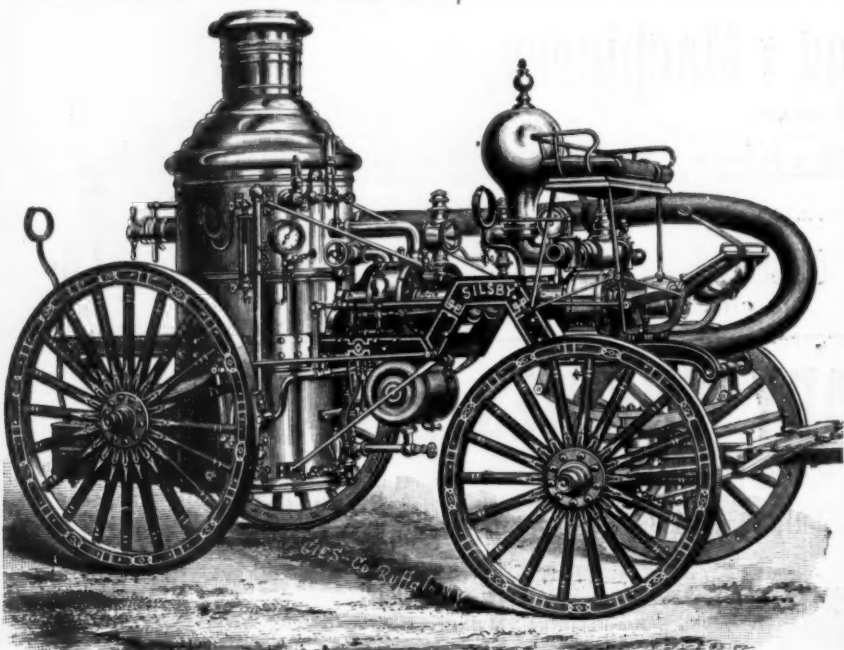
A few of the superior qualities claimed for the Silsby engine are "an entire absence of valves, connecting rods, eccentrics, cross-heads, cranks, balance wheels, packing plates, and the numerous complications of some other steamers. An experienced engi-

F. C. WELLS, manufacturer of steam pumps, Chicago, Ill., reports an order from the St. Paul, Minneapolis & Manitoba Railroad duplicating the large order reported a few weeks ago in the MANUFACTURERS' RECORD, which consisted of 27 pumps and boilers. A large-sized pumping engine has also just been shipped for the Northern Pacific Railroad. The Wells' pumps are becoming so well known that they are now in demand in South America, where many have been sold. They are in use in Venezuela and other prominent points.

THE Standard Lighting Co., Cleveland, O., write us as follows: "Our mammoth forming press is now in full operation and with a capacity for turning out from 300 to 350 stoves per day. We hope soon to be



THE SILSBY HOSE CARRIAGE.



THE SILSBY STEAM FIRE ENGINE.

for maintaining that condition, the engine—if complicated, and consequently liable to get out of order—is seldom in a state to do its best work; while in those situations where proper care-takers are provided, the demands upon the machine and its "crew" are generally so frequent and severe that there is little or no time for repairs.

This being the case, it is demanded of a steam fire engine that it shall be of the most simple design and construction consistent with the prime requisites of great capacity and durability. It must, in addition, be so light in weight as to be quickly got to the scene of action without being weak in any of its parts.

The Silsby engine is very complete in all particulars. Taking the boiler, we find in it great steaming capacity combined with compactness, durability, and that prime prerequisite for a steam fire engine, quick

circulation is so strong as to prevent the accumulation of mud, scales, etc.

The frame is of the "crane-neck" type, enabling the engineer to get under the machine readily, and also letting it be turned in a short space. The engine and pump are mounted upon two parallel wrought-iron beams, excepting the parts forming the crane neck, which are cut from suitable steel plates. The axles are of the best iron or mild steel. The wheels are the best that can be made and have steel tires.

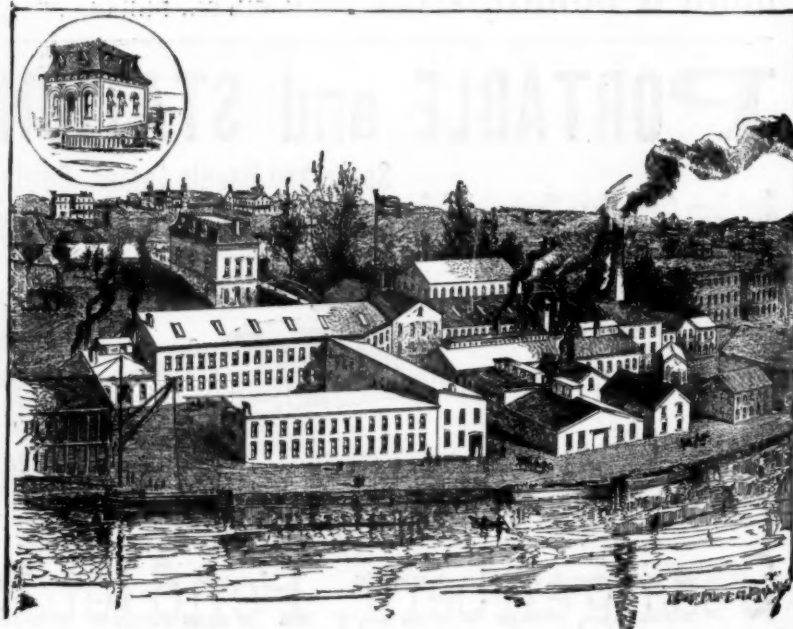
All exposed metal parts of the Silsby engine are highly polished and heavily nickel-plated. Duplicate parts are kept in stock and can always be furnished without delay. Every engine shipped from the works is accompanied by a competent engineer, whose duty it is to submit the machine to required tests and place it in service after instructing the engineers in charge.

neer is not required to operate it, nor keep it in order, although it is desirable that the man having charge of any such piece of machinery should have some knowledge of mechanics or the uses of steam.

The machine stands perfectly still while running even at its greatest speed. The motion of the pump being equable, continuous and rotary, no blows are given to the water, which enters and leaves in one

able to complete all back orders for the "New Davis" steel frame vapor stove and to execute new ones promptly; but suggest that orders be anticipated as far ahead as possible and thus avoid any delay incident to the mid-summer rush."

THE Laidlaw-Dunn Co., successors to the McGowan Pump Co., have purchased the Nottingham building, corner Pearl and Plum



THE SILSBY MANUFACTURING CO'S WORKS.

steady flow, and there is no irregular motion to the stream.

A full description of the mechanical construction and scientific workings of the Silsby engine can be found in the new catalogue for 1887, which will be sent free upon application to the Silsby Manufacturing Co.

Buy "THE NEW SOUTH." Handsomely bound in cloth. Price \$2.50.

streets, Cincinnati. This is a most prominent location in the heart of the manufacturing district. The building is 81 feet front on Pearl street by 80 feet on Plum street, five stories high, and without doubt one of the best arranged and most eligible plants in that city. The facilities for manufacture, with spacious warehouses for their stock in steam pumps, tobacco machinery and sundry specialties in steam fitters' supplies, are unsurpassed. The firm are already located in their new quarters.

TRADE NOTES.

MESSRS. BURR & DODGE, of Philadelphia, general Southern agents of Link Belt Machinery Co., have removed their Baltimore office from 11 South Frederick street to No. 39 South Holliday street, where they exhibit a full and complete line of samples of all kinds of elevating and conveying machinery, buckets, clutches and many new improvements in their line of business. They have also secured a large warehouse in this city in which they will carry a full stock of goods. The Ewart detachable chain belting, for the sale of which this firm has the Southern agency, is becoming well and favorably known, and the demand is daily on the increase. They are about to issue their new catalogue, which will show the different kinds of goods handled by them. A copy will be sent on application.

ONE of the progressive cities of the South is Augusta, Ga. Land is cheap and manufacturing facilities are very superior. There is abundant water power, and fuel is low. Most of the steam plants are using the well-known Jarvis boiler setting, and Jas. H. McKenzie, Augusta, is agent. Among his customers are the Sibley Mills, J. P. King Manufacturing Company, W. E. McCoy, Foster & Doughty Cotton Compress Company, Enterprise Cotton Compress, Arctic Ice Company, and Augusta Ice Company. The last four concerns use Alabama slack coal and wet saw dust for fuel; also cotton seed hulls.

MESSRS. P. GRAFF & SON, No. 13 North Jefferson street, Chicago, are very busy in consequence of a large contract on hand to furnish the American Cotton-seed Co., of New York, with a full set of their improved brush machines. P. Graff & Son are an old and reliable concern, who make a specialty of manufacturing steel wire brushes for cleaning cotton seed and for use in breweries, refineries, etc. It is a new departure, but a successful one, and was first introduced by Graff & Son, who are at present sole manufacturers of this patent and one of the largest wire brush concerns in the West. The adoption of these machines by the American Cotton Seed Co. will soon lead to their general use throughout the South, and adds to the list of useful and valuable inventions that Southern people will gladly welcome.

The following correspondence explains itself:

"PHILADELPHIA, May 17th, 1887.

Below you will find a copy of a letter from the Ewart Manufacturing Co., which refers to the Moline chain which has been represented in this territory by E. L. Clark, and more recently by Frank Toomey. In this connection we beg to warn you against other forms of chains which may be presented to you, as they will most likely be infringements of some of the numerous patents owned by the Ewart Manufacturing Co., under which we are the sole licensees for the States of Pennsylvania, Delaware, Maryland and Virginia, and New Jersey south of Trenton. We are also the agents of the Ewart Manufacturing Co. and the Link Belt Machinery Co., of Chicago, for their specialties applicable to the "lumber trade." We therefore beg to announce that we are prepared to furnish you with link-belt, log hauls, trimmers, slashers, and all machinery for the handling of the product of saws mills. We will be pleased to furnish estimates upon application. Yours respectfully,

BURR & DODGE."

"CHICAGO, ILL.

BURR & DODGE, Gentlemen: It is with great pleasure that we advise you that we have at last received the decision in the United States court here against the Moline Malleable Iron Co., sustaining our patent and enjoining the further manufacture and sale of their chain. Having thus disposed of our principal infringer, we will take up in turn the other chains that are being offered which are infringements of our patents. Yours truly,

EWART MANUFACTURING CO."

PATENT FIRE-PROOF PAINT.—A cheap and effective protection against fire is the patent fire-proof paint made by S. I. Russell, No. 813 Washington Building, Chicago, Ill. This paint is the result of a scientific discovery, and, it is said, tests have been made which have astonished the most skeptical. During the summer of 1882, the Criterion Theatre, of Chicago, was saved from destruction by fire owing to this paint which had been used in one of the dressing-rooms where the fire started, and the fire must have been burning several hours, for when discovered at 5 o'clock A. M., the sides and board partitions to the room were charred and the heat intense, but the fire had been confined to that room, and the theatre was saved. This paint, which can be used with all colors in lead paints and varnish, is designed to protect frame buildings and factories and mills, where inflammable materials are used, such as oil and cotton mills, etc. Age does not impair its properties, but on the contrary seems to improve it. Leading architects, builders and engineers who have made tests, say that woodwork covered with such paint is rendered almost as safe and nearly equal to fire-proof construction, and it should lessen insurance on frame structures. A sample card of these paints, with full information and prices will be furnished by Mr. Russell upon application. The hardware trade will find it a salable article.

THE parties interested in the Campbell cotton compress machine have organized a company, with \$100,000 paid-in capital, under the title of the Campbell Cotton Compress Co., with headquarters at 59 and 61 Walnut street, Cincinnati, O. The following reputable well-known men are the officers of the new company: A. M. Dolph, president; C. C. Campbell, vice-president and general manager; Joseph Sharp, treasurer, and J. R. Clark, secretary. In localities where 40,000 bales or more are now shipped to the seaport cities for pressing, these machines can be used to great advantage, paying for themselves, it is said, by the saving in cost of transportation, in a single season.

THE managers of machine shops and others having occasion to use emery wheels will find much that will be of value and interest to them in a pamphlet issued by the New York Belting & Packing Co., 15 Park Row, New York. It contains a complete and able article on emery wheels and elaborate illustrated descriptions of their vulcanite wheels.

MR. HENRY KINDT, Cincinnati, O., has recently enlarged and improved his furniture factory, putting in a full line of the latest improved wood working machinery manufactured by the Egan Co., Cincinnati.

"THE Pump Catechism," a practical help to runners, owners and makers of pumps of any kind etc., by Robert Grimshaw, M. E., author of "Steam Engine Catechism," "Boiler Catechism," "Square Root Made Easy," and many other practical works. The Practical Publishing Co., 5 and 7 Dey street, New York, has just issued a second edition of this hand book, which, it appears to us, answers every conceivable query that can be suggested. The catechism tells, for instance, how to put entirely together, set up, adjust, and run all the leading pumps in the market. The volume also contains rules for calculating areas and circumferences of circles; volumes of cylinders, and of tanks of all shapes; pressure of expanding steam; duty of pumps and of pumping engines. Tables relating circumferences, areas, squares, etc., which cannot fail to prove invaluable to all interested. The book can be had for \$1, post paid, by addressing the publishing company as above.

BERNHARD DIETZ, Manufacturer of Printers' Rollers, and Roller Composition. Factory, cor. Light and Mercer streets, Baltimore. Prices: Composition, (bulk) 30 cents per lb.; for Casting, also, 30 cents per lb. Orders by Mail promptly attended to.

Important.

When visiting New York city, save baggage express and carriage hire, and stop at the Grand Union Hotel, opposite Grand Central Depot.

600 handsomely furnished rooms at \$1 and upwards per day. European plan. Elevators and all modern conveniences.

Restaurants supplied with the best. Horse cars, stages and elevated railroads to all depots. You can live better for less money at the Grand Union Hotel than any other first-class hotel in the city.

TRAVELERS bound for Boston will do well to stop at the favorite American House in that city, where all the comforts of a quiet first-class hotel, and all the luxuries of the season at table may be enjoyed at popular prices.

THE Palace Hotel, Cincinnati, Ohio, is the best, finest furnished and most complete \$2.00 hotel in America. 250 rooms; 140 front rooms. Complete fire apparatus and iron balcony fire-escapes.

List of Patents.

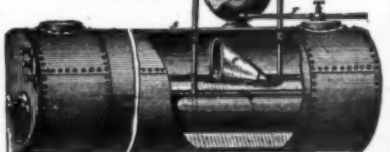
The following Patents were granted to citizens of the Southern States, bearing date May 31, 1887. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

Ayer, Alfred, Lake Weir, Fla. Machine for sizing oranges and other fruit.....363,974
Badger, G. M., Quitman, Ga. Fifth wheel.....363,976
Baird, G. W., Hendersonville, N. C. Harness.....363,881
Bennett, E. A., Weston, W. Va. Arm rest.....364,083
Cord, G. F., Covington, Ky. Electric motor.....364,086
Cleaver, David, Lebanon, Ky. Wire stretcher.....363,805
Cornelius, John, Oakland, Md. Stump tractor.....364,098
Dryden, W. T., Argenta, Ark. Fare box.....364,164
Dunning, J. A., Aulander, N. C. Horseshoe.....363,996
Fowler, J. H., Orangeburg, S. C. Cultivator, harrow, and cotton chopper.....363,999
Fraser, John, New Orleans, La. Egg carrier.....364,004
Gallagher, Henry, Savannah, Ga. Car coupling.....364,007
Gedge, B. H., Covington, Ky. Railway signal.....364,009
Golet, E. B., Fort Worth, Texas. Combined chair and sleeping car.....363,891
Harding, D. J., Louisville, Ky. Car coupling.....364,104
Heinig, F. E., Louisville, Ky. Paint box.....363,854
Kahn, Frank, H., and L. Morris, Memphis, Tenn. Pants.....364,115
Kidd, L. C., Richmond, Va. Automatic lamp-extinguisher.....363,830
Klotz, Philip, Baltimore, Md. Range.....364,116
Lenix, J. M., and G. B. Swann, Norton, Texas. Brace for bedsteads, gates, &c.....364,007
Lesnesco, J. E., Nashville Tenn. Metall'c car seal.....364,026
Miller, F. C., Newport, Ky. Cigar mold.....364,183
Philpott, H. V., Bryan, Texas. Gate.....363,964
Pickert, A. F., Atlanta, Ga. Automatic cut-off.....363,963
Price, W. G., New Orleans, La. Automatically operating camera shutter.....363,967
Robbins, H. R., Baltimore, Md. Steam heater for railway cars.....364,134
Selden, Chas., Baltimore, Md. Multiple-telegraph system.....363,969
Simpkin, William, Richmond, Va. Safety valve.....364,052
Smith, J. H., Little Rock, Ark. Weather board gage.....361,056
Vick, J. I., Hornsborough, S. C. Lasting-tool.....364,064
Watson, J. H., Savannah, Ga. Sad-iron heater.....364,069
Young, J. W., Nashville, Tenn. Spring bed.....364,076

A. P. THAYER,
Solicitor of U. S. and Foreign
PATENTS,
No. 86 Astor House, New York.

Experience of Over 20 Years

HOW TO KEEP BOILERS CLEAN
And Prevent SCALING, FOAMING, BURNING. Price \$75.00. Removes Lime Oil, Magnesia, without use of Compounds



Hotchkiss Mechanical Boiler Cleaner, Illustrated in an eighty-eight page book, which will be mailed FREE, to any address, by JAS I. HOTCHKISS, 150 Liberty St., N. Y. Beware of infringers.

A Big Chance

—THE—
Canton Cotton Factory,
CANTON, MISS.,

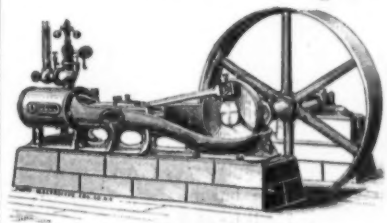
Is Offered for Sale at
\$18,000

This factory is situated on the line of the Illinois Central Railroad, one mile north of the city of Canton, Miss., in a splendid cotton region, good water supply, cheap fuel (wood and Alabama coal) and abundant labor. The factory is equally well adapted for a WOOLEN MILL OR COTTON-SEED OIL MILL. The property consists of 28½ acres of land, running parallel to the Railroad, and adjacent to it. The factory building is in the center of the tract, one hundred yards from the railroad, is a brick building, substantially built, 200x90 feet, two stories high, brick chimney stack 75 feet high. The factory contains ONE ENGINE, 200 HORSE-POWER; TWO LAPPERS; A CONSIDERABLE QUANTITY OF SHAPING AND PULLEYS. There is a double dwelling house on the property. The climate healthy. Manufacturing in Mississippi is exempt from taxation. The property has been paid for in full by the owner; it is unincumbered. The building alone cost \$40,000. This is a magnificent opportunity to engage in cotton manufacturing in the South. For full particulars, address

D. ESTE REYNOLDS,

Care MANUFACTURERS' RECORD, Baltimore.

The "MOGUL" Engine.



NEW DESIGN.
Bearings extra long, compact, simple, strong, durable, and of

Superior Workmanship and Materials.

The BEALL Engine, Boiler
AND MACHINE WORKS,

MERWIN MCKAIG, CUMBERLAND, MD.

MANUFACTURERS OF
The "MOGUL" Engines,

Pulleys, Shafting, Couplings, Collars, &c.
Pulley Turning Machines, Pulley Boring Machines, Shafting Lathes, Shafting Straighteners and Cylinder Boring Machines.
Send for low price-lists and big discounts.

IMPORTANT
To Wharf Owners.

THE PATENT PILING PROTECTOR CO., BRUNSWICK, GA., is prepared to protect piling from the Terebo and other Marine Pests in any Harbor in the United States, and will erect its plant, which is inexpensive, in any Harbor where a contract is offered, and prepare piling from the timber near at hand. The process is thoroughly effective, indestructible in salt water, and protection for ten years guaranteed. Is fully protected by letters patent. Has been tested for six years; is better than metal covering; as good for piling in some respects better than crocoting; costs less than one-half as much as metal covering or crocoting. Circulars fully explaining process will be sent upon application. Correspondence solicited.

Address,
C. F. GOODYEAR, President,
BRUNSWICK, GEORGIA.

To Bore for Oil.

BIRMINGHAM, ALA., June 2, 1887.

Editor Manufacturers' Record:

The Walker County Coal Oil Co. has been organized, with a capital stock of \$50,000, for the purpose of boring for coal oil in Walker county. We find at a depth of 14 feet, a soft sand rock strongly impregnated with coal oil. The company is now negotiating with a well-boring firm for the purpose of boring to a depth of 3,000 feet if necessary, to see if oil will flow in working quantities. If we find it in working quantities, a refinery will be built in this city, and oil brought here from the well in pipes.

JNO. S. JEMISON,

Received Contract to Build Railroad.

DALLAS, TEXAS, June 3, 1887.

Editor Manufacturers' Record:

We have been awarded contract to build the Southwestern extension of the Missouri Pacific system, from here to Hillsboro, distance 67 miles. We have entire contracts, bridges, etc.

A. DAVIS & Co.

More Factories for Calera.

CALERA, ALA., June 1, 1887.

Editor Manufacturers' Record:

On June 1, the Agricultural Improvement Works will be commenced, and another shoe works will go up. We are now building large water works, which will be supplied by artesian wells. We offer special inducements to those desiring to enter into manufacturing. We will donate all land necessary, and will allow wood workers to cut our timber without charge. Where it is necessary we will also make loans for 5 years at legal interest. WADE ALLEN, A. G. M.

LITTLE ROCK, ARK., June 4, 1887.

Editor Manufacturers' Record:

I have been thinking of establishing a handle factory at Hensley, Ark., which is 18 miles from Little Rock, on railroad. The only thing in the way is a good, practical man to run the business, which I hope to find soon. I will be at Tate Springs, Tenn., for the next 4 months. W. B. HENSLEY.

MACON, GA., June 4, 1887.

Editor Manufacturers' Record:

We expect to erect shops for repairing our rolling stock some time during construction of our line from Macon south. Plans not yet determined upon.

GEORGIA SOUTHERN & F. R. R. Co.

Developing Mines.

HOT SPRINGS, ARK., June 2, 1887.

Editor Manufacturers' Record:

I am associated with E. A. Douglas, C. H. Weaver, of Hot Springs, and A. D. Simpson, of Troy, N. Y., in developing some prospects, one of which we have a lease for 18 years, on which we are driving a tunnel. Contract let for 100 feet at this writing; 65 feet under cover, showing a fine vein of gray granite and porphyry 9 feet wide, carrying gold and silver; assays run from \$5 to \$20 per ton. If sufficient ore is found, machinery will be erected. A new company is being organized to operate near Potash Sulphur Springs on 6 good prospects, \$5 to \$8.10 per ton, of which I am the originator.

P. W. MASTERS.

Building Saw Mill.

ARCADIA, FLA., June 1, 1887.

Editor Manufacturers' Record:

Sohanson & Isgren, two energetic Swedes, are building a substantial saw mill on the banks of Peace river. Good pine and cypress for 20 miles up the river. Mill will be running in about 2 weeks. 200,000 feet of logs in the boom.

T. L. HERNDON.

To Build a Sewerage System.

SHERMAN, TEXAS, June 1, 1887.

Editor Manufacturers' Record:

A system of sewerage will be put in or built in this city during this year, I think, without doubt. A good system of water works will soon be completed with about 10 miles of mains, and the system will be owned and operated by the city. Two large hotels, 3-story brick, will soon be completed. This city is lighted with gas and electricity, and the electric light system will soon be extended.

J. P. GERREU.

To Build a City Hall.

WACO, TEXAS, June 3, 1887.

Editor Manufacturers' Record:

We contemplate building a city hall. The mayor will receive bids for building same as soon as plans and specifications are ready.

T. C. TIRBS.

WYLLIE, TEXAS, May 28, 1887.

Editor Manufacturers' Record:

We are at work on a ginney, and will be in good trim for this cotton season. Our capacity will be about 30 bales per day.

SMITH & CHANIPLIN.

A Coal Mining Company.

CHARLESTON, W. VA., May 31, 1887.

Editor Manufacturers' Record:

We have formed the Buffalo Creek Coal Co., with principal office in this city. The stockholders are as follows: Wm. Beury, Shamokin, Pa., 40 shares; J. L. Beury, Fire Creek, W. Va., 40 shares; O. A. Thayer, Charleston, W. Va., 39 shares; G. T. Thayer, Charleston, W. Va., 1 share, and W. T. Thayer, Charleston, W. Va., 40 shares.

O. A. THAYER.

KNOB CREEK, N. C., May 23, 1887.

Editor Manufacturers' Record:

My shingle mill and cotton ginning outfit were burned. Will rebuild shingle works, by restocking the old irons this summer, and will try to get a good second-hand gin about 60-saw, with feeder and condenser.

A. H. CLINE.

Building a Church.

WILMINGTON, N. C., June 1, 1887.

Editor Manufacturers' Record:

I have the contract to build the Bladen Street Methodist Church, in this city, and work is now progressing. J. W. ROWELL.

Rebuilt Distillery.

ELLIJAY, GA., June 1, 1887.

Editor Manufacturers' Record:

I have rebuilt my distillery and am ready to start up now; will commence operation by 10th June.

M. V. TEEM.

COYNER'S SPRINGS, VA., June 4, 1887.

Editor Manufacturers' Record:

There is a deposit of zinc and silver ore at this place being developed at this time by a Northern syndicate, but the company is not fully organized yet. The ore is said to be very rich in zinc.

J. H. RILEY.

CONCORD, GA., June 1, 1887.

I have just completed my wood factory, but have not commenced work, and do not know what amount of machinery I will need.

J. T. TRICE.

FAIRBANKS, FLA., June 4, 1887.

Editor Manufacturers' Record:

We intend to make Jacksonville our headquarters. Besides having our storeroom and office there we shall manufacture all wines there we can to advantage, as well as manufacture at other points where the raw material can be had in abundance.

D. P. WARNER.

New Lumber Mills.

BRONSON, FLA., June 4, 1887.

Editor Manufacturers' Record:

G. H. Sullivan has lately erected a splendid mill with planer and moulding attachment at Ellzey, in this county, and is turning out quantities of lumber. Benj. Eager has erected a large mill at Wacasassa, near here, and is cutting large orders for DeLesseps canal, in Panama. Geo. W. Moody will erect a large mill at Ellzey within the next two weeks. The lumber business is getting to be one of the largest industries here. The country is on a genuine boom.

J. V. BURKE.

Developing a Gold Mine.

ABBEVILLE, VA., June 3, 1887.

Editor Manufacturers' Record:

I have developed a gold mine here and will work it. It is a placer mine, and is rich in gold, and when I make further developments and find out the best machinery to handle this gravel bed to best advantage and get to bed rock, I will be prepared to put up works and machinery.

CAPT. JOHN D. CORNWALL.

Will Erect Saw and Grist Mill and Canning Factory.

THE ROCKS, MD., June 2, 1887.

Editor Manufacturers' Record:

In addition to my two corn-packing houses, I shall erect a large building to be used for tomato canning, and a saw and grist mill, and shall have both steam and water power, which will give me capacity for 30,000 cases corn and 20,000 cases tomatoes, all of which I now have sold.

C. A. RUTLEDGE.

Enlarging Factory.

HOLLY SPRINGS, MISS., May 30, 1887.

Editor Manufacturers' Record:

We are now enlarging our factory. We have two kilns in operation and intend to increase to four kilns at once.

HOLLY SPRINGS STONEWARE CO.

Erected a Saw Mill.

SHELL MOUND, MISS., June 2, 1887.

Editor Manufacturers' Record:

I have erected a variable feed saw mill at this point, to be run by a 35 horse power buckeye automatic cut-off engine with steel boiler.

OSCAR F. BLEDSOE.

To Manufacture Clothing.

BIRMINGHAM, ALA., May 31, 1887.

Editor Manufacturers' Record:

Our company was chartered on the 25th inst. K. F. Benndorf, of Cincinnati, is president, E. D. Bacon, vice-president and superintendent, and John I. Howe, secretary and treasurer and general manager. We expect to start operations this week.

BIRMINGHAM CLOTHING MFG. CO.

MERIDIAN, MISS., May 30, 1887.

Editor Manufacturers' Record:

The Warrior Coal Fields Railroad will be constructed at an early day. The line is now being located between this point and Narkeeta (30 miles) and grading will commence on the 6th of June. 12,500 tons of 60 lb. steel rail are already purchased. From Narkeeta to Gainesville, (on the Tombigbee river), 21 1/2 miles, the road bed is already graded.

W. W. HUNGERFORD.

Prest. W. C. F. C. & D. Co.

Will Build a Hotel.

ABBEVILLE, GA., May 27, 1887.

Editor Manufacturers' Record:

I expect to build a hotel in the near future in Abbeville.

A. R. ROYAL.

Cotton Mill Enlarged.

MERIDIAN, MISS., May 30, 1887.

Editor Manufacturers' Record:

I have bought the cotton machinery from the Neponset mill, Corinth, Miss., and have moved same to East Mississippi mills, near Meridian, Miss., which now makes my mill have 3,000 spindles and 50 looms.

J. S. SOLOMON.

KINGSTON, TENN., May 31, 1887.

Editor Manufacturers' Record:

A number of gentlemen have incorporated a company, to be known as the Kingston Mining & Manufacturing Co. We have some valuable iron ore lands north of this place, which we expect to operate as a joint stock company.

KINGSTON MINING & MANUFACTURING CO.

A Moss Factory.

SANFORD, FLA., May 31, 1887.

Editor Manufacturers' Record:

A moss factory is now being erected, and is of large capacity; also a wire and picket fence factory has been established within the past month.

J. C. H. RAND.

OOLTEWAH, TENN., June 1, 1887.

Editor Manufacturers' Record:

The Ooltewah Lime Co. will begin operations at once.

G. W. HOWARD, Secy.

Will Mine Kaolin.

LANGLEY, S. C., June 1, 1887.

Editor Manufacturers' Record:

The object of the Craig Kaolin Co. is to mine its own clay, but will sell or lease. The capital is \$15,000 in 150 shares. Will commence work immediately.

T. L. CRAIG.

Rebuilding Saw Mill.

CLEVELAND, TEXAS, May 31, 1887.

Editor Manufacturers' Record:

My mill burned on morning of 6th inst., and I am rebuilding as rapidly as possible and putting in a first-class outfit.

A. W. MORRIS.

Extending Railroad.

SANFORD, FLA., June 2, 1887.

Editor Manufacturers' Record:

Work has commenced on extension from Tampa to Black Point, and we expect same to be completed by November 1, 1887.

SOUTH FLA. R. R. Co.,

B. R. SWOOP, Supt.

Water Works to be Built.

GREENVILLE, MISS., June 1, 1887.

Editor Manufacturers' Record:

The contract for the water works at this place has been let by the city, as far as the city is concerned, to Louis Metesser and associates. His office is 34 and 36 St. Charles street, New Orleans. Work is to begin within the next 45 days.

JAS. BURKE.

BRIDGEPORT, FLA., June 4, 1887.

Editor Manufacturers' Record:

I am about to start a saw mill here provided the one now here does not sell out. There are parties trying to buy it, and if they succeed I shall keep out of saw mill and go into making bricks. Have engine, boiler, shafting, pulleys, hangers, &c., all here, taken from my factory in Bridgeport, Conn.

MITCHELL RENZ.

Erected a Planing Mill.

CHATTANOOGA, TENN., May 31, 1887.

Editor Manufacturers' Record:

H. A. Johnson & Co. are building a planing mill, or rather have it built now. Will be running in ten days' time.

H. A. JOHNSON & Co.

Erecting 31 Houses.

CINCINNATI, O., June 4, 1887.

Editor Manufacturers' Record:

The Jefferson Building & Improvement Co., of Birmingham, Ala., have under contract 31 houses, and will shortly begin the erection of 12 more. The houses range in cost from \$1,000 to \$5,000, and are intended to meet the growing demand for better class homes in Birmingham. The company's houses are sold faster than they can be finished.

ARCHER BROWN.

GALVESTON, TEXAS, June 1, 1887.

Editor Manufacturers' Record:

We are building a railroad east from this city to end of the island, about 2 miles. We then get on the line of the jetty, built by the government engineers, and will push the road out over this jetty as far as last appropriation, \$300,000, will carry it, say about two miles from east end of island. We estimate that we will put in jetty about ten to twelve thousand carloads stone and clay.

A. M. SHANNON & CO.

LOGAN MILLS, KY., June 3, 1887.

Editor Manufacturers' Record:

Dr. W. P. Orndorff is corresponding with parties in regard to erecting a small roller mill at this place soon. He formerly owned both flour and woolen mills here, but they were burned December 3, 1885. This is a splendid mill site, about five miles from Adairville, which is our postoffice.

JOHN McDONNELL.

Will Erect a Large Compress.

GALVESTON, TEXAS, June 2, 1887.

Editor Manufacturers' Record:

We have just signed contracts for the erection of a 2-story cotton warehouse, to be completed for coming season's business. Building of brick, 140x260 feet, has 8 fire-proof compartments. This is the inauguration of a new departure in the line of cheapening the handling of cotton at this port. We also put in this season, but too late for much work, the most powerful compress yet erected, by which we expect to put 33 per cent. more cotton in a vessel. The Star Mills are just completing a magnificent new flouring mill and elevator. A company was formed to build a bagging and cordage manufactory, and have just bought 2 blocks of ground each 300x260 feet. Will build this summer. The success of the artesian well has stimulated such enterprises.

TAYLOR COMPRESS CO.

Extending the Norfolk & Western.

ROANOKA, VA., June 6, 1887.

Editor Manufacturers' Record:

The Clinch Valley Railroad, now being constructed by the Norfolk & Western Railroad Co. from Graham station, Tazewell county, Va., on the New river division of the Norfolk & Western Railroad, to a junction with the Louisville & Nashville Railroad, in Wise county, Va., will open up the finest timbered section of the State of Virginia. Walnut, poplar, cherry, hickory, white oak, chestnut oak and red oak are abundant along the entire line. The Clinch Valley extension will pass through the counties of Tazewell, Russell and Wise following the Bluestone river from Graham station to its headwaters, thence down the Clinch river to the mouth of Russell creek, up Russell creek, crossing to Gess river, thence up Gess river, crossing to Powell's river, down Powell's river to a junction with the Louisville & Nashville extension. Magnificent water-power is to be found along the entire line, with an abundant supply of water at all seasons of the year. It is expected that the entire line of the Clinch Valley extension will be completed within 18 months.

CHAS. G. EDDY, Vice-Pres.

To Manufacture Lamps.

BALTIMORE, MD., June 1, 1887.

Editor Manufacturers' Record:

The Standard Automatic Gas Light Co. was incorporated May 28, 1887. Will have its principal office at 217 East Baltimore street, with branch offices in Chattanooga, Atlanta, Montgomery and Jacksonville. They propose to contract for lighting streets, parks and public grounds; also manufacture lamps for their own use.

W. G. WEBB, Pres. & Gen. Man.

Wood-Working Establishments to be Erected.

MEMPHIS, TENN., May 30, 1887.

Editor Manufacturers' Record:

Work on the Prospect Motor Line is progressing rapidly. Large forces of men and teams are at work. The Chickasaw Land Co. also have a large force of men at work on the park and grounds. They have also secured the location of large wood-working establishments on their land fronting on the Mississippi river. This will at once mean the creation of quite a village of some 1,000 to 1,500 people on their lands. Work will begin on the Belt Railway in a few weeks.

S.

Flour Mills Refitted.

CATLETTSBURG, KY., June 5, 1887.

Editor Manufacturers' Record:

The flouring mills of John G. Patton & Co. have been thoroughly overhauled, and have been supplied with a full set of rollers by Knowlton & Doland, of Logansport, Ind.; also a "Corliss engine" of 100 horsepower, built by C. & G. Cooper & Co., of Mt. Vernon, Ohio.

Messrs. Ward & Sweeney, of this city, have made a contract with the N. N. & M. Valley Railroad Co., to furnish them with 4,000,000 bricks for "Big Bend Tunnel," near Alderson, W. Va. Among my recent sales are a boiler and engine to the above firm, (Ward & Sweeney,) which will drive their machinery at the brickyard near Alderson, W. Va.

The Keys Creek Lumber Co. are rebuilding their saw mill in the lower end of this city, recently reported as burned, and will soon be ready for running.

HARLAN P. WELLMAN.

COALBURGH, W. VA., June 3, 1887.

Editor Manufacturers' Record:

After eleven months' continuous run we stopped on the 1st inst. for repairs. We will build new and larger railroad loading works, with facilities for loading two box cars and one open car at the same time. The inclined plane will be relaid with 20-pound steel rails, and a new ventilating furnace will be erected. The cost of improvements is about \$2,750.

ROBINSON COAL CO.

Erecting a Weaving Mill.

COLUMBUS, GA., June 6, 1887.

Editor Manufacturers' Record:

I am, under the supervision of Mr. E. N. Clemence, of the Eagle & Phoenix mills, erecting a 50 loom weaving mill for the manufacture of gingham. T. J. PEARCE.

GRIFFIN, GA., June 1, 1887.

Editor Manufacturers' Record:

The contract for building 157 miles of the Birmingham & Atlantic Railroad, running from Birmingham, Ala., to Savannah, Ga., has been let out to Mason, Carpenter & Co. They have a large body of men already engaged, and as quick as they can transfer them to our line, the work will begin. Trains are to run over the line so constructed by February next. Other parts of the line will be let out as soon as engineers have rendered their reports. W. E. H. SEARCY.

Pres. Ga. B. & A. A. R. R. Co.

Building Up Gadsden.

GADSDEN, ALA., May 28, 1887.

Editor Manufacturers' Record:

The Alabama Furnace Company is building a 100-ton furnace. Many laborers at present are at work upon it.

The Gadsden Ice Company is erecting a large, commodious building for an ice factory. They hope to be manufacturing ice by the middle of June.

Stock is being rapidly subscribed to a new 50 ton charcoal furnace, which will be erected at once.

The Excelsior Electric Light Company, of New York, has just erected lights in Gadsden. Their new boiler and engine arrived last week. F. W. Horne, the Southern agent, has located here and will make Gadsden his headquarters in the future.

A new company has just been organized to establish a new paint mill. This will make two paint mills for Gadsden.

The First National Bank is conducting an immense business. This bank was organized on the 23d of February last.

The Gadsden Hotel Company is moving rapidly along with the work on the Printup House, a four-story brick building, which will cost about \$40,000. This will be the finest hotel in any town the size of Gadsden in the South.

The new railroad will soon be completed between this place and Rome, Ga. Also there are 600 employees at work on the new railroad between this place and Anniston. Both roads will be ready for the cars by December 1.

Engineers are in the field surveying the route for the extension of the Georgia Central Railroad, which will run via Gadsden and connect with the Illinois Central Road. 500 hands are also at work on the Baltimore, Birmingham & Gulf Railroad between Gadsden and Leeds, so we have been informed. It will be a bright star for Gadsden when the last two named railroads are completed.

Twenty thousand bales of cotton are marketed here each season. Wagons often come as far as seventy five miles to this market. It is a fine point for trade.

The Times and News have added a new 4 horse-power water motor to their printing office. In a short time they will publish a daily newspaper in connection with their weekly. The weekly has a circulation of 2,500.

The Gadsden Land & Improvement Com-

pany will soon erect a two hundred room residence at Belleview, a beautiful tract of suburban land of theirs, and the next thing they will build is a dummy railroad via the hotel to Black Creek Falls, a distance of two miles from the city.

Summer visitors are beginning to fill up the hotels in the city. Gadsden has the finest chalybeate, sulphur and freestone water in the world.

Our four large steam saw mills are running on full time. They are filling orders at present for Ontario, Canada. They do a very large shipping business.

Coosa Furnace is turning out each day 50 tons of very fine iron. Indeed it is of a superior quality.

Capitalists are still seeking real estate. Several parties from New York and Ohio are in the city purchasing property. Mr. J. H. Watt, of Barnesville, Ohio, has just purchased a block from A. Harris. Messrs. Butman and Williams, of New York, have closed a trade for the Southern Lumber Company mills. It is rumored that the plant will be used for car works.

The Gadsden Mineral Land Company has bought thousands and thousands of dollars worth of minerals and are still buying more.

A Baltimore syndicate recently purchased 190 acres of land near the city. We are not in a position to know, but we are reliably informed that they will erect stove works. We will see in a short time what they will do with the land.

Gadsden is located on the Coosa river. Steamboats ply her waters from one season to the other. We have some elegant passenger steamers on the Coosa owned by Col. John J. Seay. P.

ANTHONY, FLA., June 2, 1887.

Editor Manufacturers' Record:

I bought two weeks ago a half interest in five acres of land on which lime rock is. We feel that we have an almost inexhaustible quantity. The rock is of excellent quality for making lime—in fact, the lime made here at Ocala, which is just like ours, is 33 per cent. better than any lime we have been shipping here from Alabama for several years. We desire to put our lime works in operation at an early day. D. A. SMITH.

JAMES BATES, 1, 3 and 5 President street, Baltimore, will make the three-story addition to his foundry and elevator works 25x100 feet, instead of 25x65 feet.

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THE INN is the most quiet, elegant and home-like place in the world. Its location in Anniston, "The Model City of the South," a thousand feet above the Gulf, with pure air, health-restoring water, within easy distance of New Orleans, Mobile, Montgomery, Selma, Atlanta, Macon, Columbus, Ga., Rome, Chattanooga, Knoxville and Nashville, makes it unequalled as a great summer resort for Northern as well as for Southern people. Surrounded in every direction for fifty miles with forests of Georgia pine; a country thoroughly drained; no swamps or malaria; and in the very heart of the great mineral belt of North Alabama, Georgia and East Tennessee; on the line of travel from Washington to New Orleans; from Cincinnati, St. Louis and Louisville to all points on the Gulf; accessible by palace cars from any point in the United States, Anniston presents to the invalid, the pleasure seeker or the explorer a delightful summer climate, pure, fresh and bracing air, the best water and most charming scenery, and a point from which every city in the South, and the great mineral and timber belts, can be reached. This Inn is magnificently furnished, lighted by electricity throughout the entire building, and in every feature is sure to charm those who are so fortunate as to stop there. For full particulars as to prices, rooms, &c., address

H. HARDELL, Manager.



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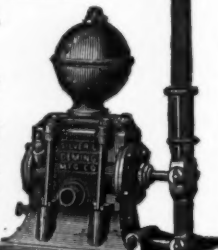
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\$1.50	\$2.50	\$6.00
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My 1 1/4 Point is 24 1/2 in. long and has 24 1/4 by 1/8 openings.

A showing the openings before the wire gauze is soldered on. B after wire gauze is soldered on. C showing wire gauze and perforated brass soldered on. These 1 1/4 Points (caliber) are Electro-Plated, with Pure Block Tin inside and outside before receiving the coverings, there being no raw iron to corrode or rust or cause an unpleasant taste in the water. The Electric Process by which it is done is patented and exclusively owned and controlled by me for Driven Well Points in the United States. Warranted not to strip loose where soldered. Write for discounts and circular.

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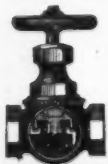
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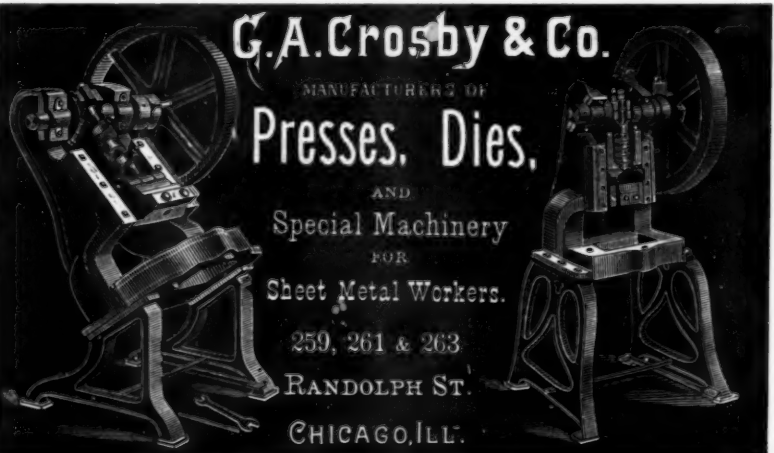
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Ives' "Jennings" Bits..... dis 40¢
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Expansive Bits, Blake's..... dis 45¢
Hollow Augers, Ives'..... dis 25¢
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Hol. Aug., Bonney's Adjust., 1/2 doz 45¢, dis 40¢
Hol. Aug., Stearns' Adjust., 1/2 doz 45¢, dis 40¢
Hol. Aug., Ives' Expansive, each 4.50, dis 25¢
Hol. Aug., Universal Expansive, each 4.50, dis 25¢
Wood's..... dis 25¢
Gimlet Bits..... 50¢ gross, dis 50¢
Gimlet Bits, Diamond..... dis 50¢
Double Cut Gimlet Bits, Shephardson's..... dis 40¢
Double Cut Gimlet Bits, Doughlass'..... dis 40¢
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Awls, Sewing, Common..... 1/2 doz 35¢
Awls, Shouldered Peg..... 1/2 doz 45¢
Awls, Patent Peg..... 1/2 doz 35¢
Awls, Shouldered Brad, 1/2 doz 40¢
Awls, Handled Brad, 1/2 doz 40¢
Brad Sets, Aiken's..... 1/2 doz 45¢
Brad Sets, No. 42, 1/2 doz 45¢
Brad Sets, Stanley's Exc., No. 1, 1/2 doz 40¢
Brad Sets, Stanley's Exc., No. 2, 1/2 doz 40¢
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Second quality Axes..... 75 cts less than above

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Cow, Western, Sargent's List..... dis 70¢
Cow, Kentucky, Sargent's List..... dis 70¢
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BELLOWS.
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Van Sand's Screw Pattern, 1/2 doz gross, net..... dis 60¢
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Barbed, 1/4 in. and larger..... 1/2 doz 90¢
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Norway..... dis 75¢
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Cast Brass, Loose Joint..... dis 35¢
Fast Joint, Narrow..... dis 60¢
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Loose Pin, Acorn..... dis 70¢
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Tips..... dis 70¢
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Fast Joint, Narrow..... dis 70¢
Fast Joint, Lt. Narrow..... dis 70¢
Fast Joint, Broad..... dis 70¢
Loose Joint, Broad..... dis 70¢
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Spring Hinges..... dis 30¢
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Hart Manufacturing Co..... dis 60¢
American Spring Hinge Co's..... dis 25¢
Gem Spring Hinges..... dis 25¢
Blind Butts, Shephard's, Nos. 50 and 60..... dis 70¢
Blind Butts, Shephard's, No. 50..... dis 70¢
Blind Butts, Shephard's No. 75..... dis 70¢
Blind Butts, Lull & Porter..... dis 75¢
Blind Butts, Huffer..... dis 50¢
Blind Butts, Standard..... dis 75¢
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NEW PENS.
Humason, Beckley & Co's..... dis 55¢
Sargent & Co's..... dis 70¢
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BUTCHER'S CLAWERS.
Humason & Beckley Mfg. Co..... dis 50¢
Bradley..... dis 25¢
Beatty's..... dis 40¢
CAN OPENERS.
American..... gross 13.50
New Idea..... gross 15.00
No. 4, French..... gross 15.50
No. 5, Iron Handle..... gross 16.00
Sardine Scissors..... gross 17.00
Sprague, No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

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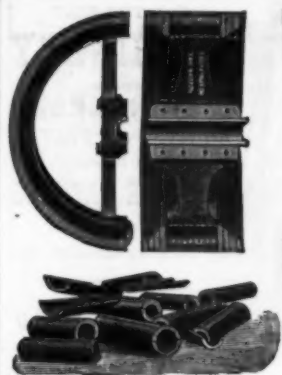
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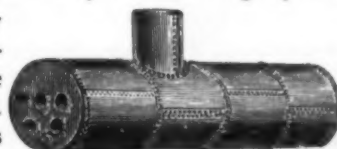
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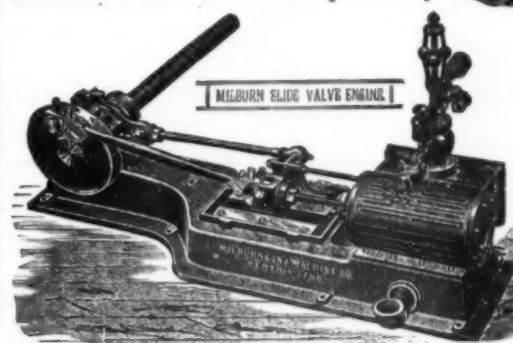
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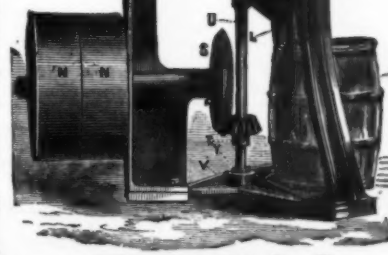
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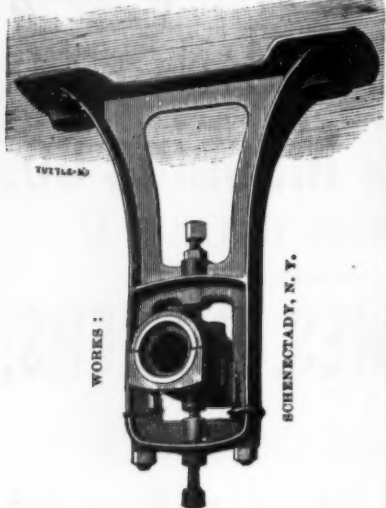
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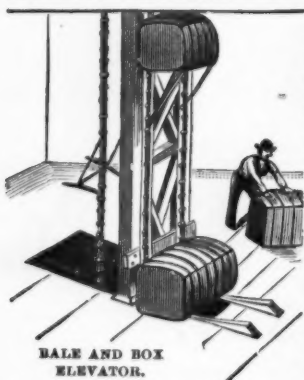
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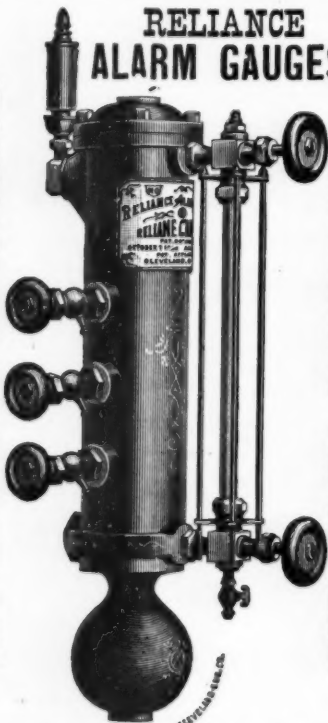
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Fig. 114.
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Fig. 118.
Fig. 119.
Fig. 120.
Fig. 121.
Fig. 122.
Fig. 123.
Fig. 124.
Fig. 125.
Fig. 126.
Fig. 127.
Fig. 128.
Fig. 129.
Fig. 130.
Fig. 131.
Fig. 132.
Fig. 133.
Fig. 134.
Fig. 135.
Fig. 136.
Fig. 137.
Fig. 138.
Fig. 139.
Fig. 140.
Fig. 141.
Fig. 142.
Fig. 143.
Fig. 144.
Fig. 145.
Fig. 146.
Fig. 147.
Fig. 148.
Fig. 149.
Fig. 150.
Fig. 151.
Fig. 152.
Fig. 153.
Fig. 154.
Fig. 155.
Fig. 156.
Fig. 157.
Fig. 158.
Fig. 159.
Fig. 160.
Fig. 161.
Fig. 162.
Fig. 163.
Fig. 164.
Fig. 165.
Fig. 166.
Fig. 167.
Fig. 168.
Fig. 169.
Fig. 170.
Fig. 171.
Fig. 172.
Fig. 173.
Fig. 174.
Fig. 175.
Fig. 176.
Fig. 177.
Fig. 178.
Fig. 179.
Fig. 180.
Fig. 181.
Fig. 182.
Fig. 183.
Fig. 184.
Fig. 185.
Fig. 186.
Fig. 187.
Fig. 188.
Fig. 189.
Fig. 190.
Fig. 191.
Fig. 192.
Fig. 193.
Fig. 194.
Fig. 195.
Fig. 196.
Fig. 197.
Fig. 198.
Fig. 199.
Fig. 200.

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This company is the pioneer in throwing down the bars of unjust discrimination against women in life insurance. Statistics and common observation prove mortality to be in favor of females at every age, and married as well as single. To remove this prejudice, and to secure to women an equal estimation in her insurability, the promoters of this enterprise have devoted themselves. Consistently with this principle WOMEN AND MEN are equally insured in this company without discrimination on account of sex.ITS MEMBERSHIP
comprises persons between the ages of 18 and 60, of approved physical condition. The Life Class is separate and distinct from the Accident Class, members being liable for losses only occurring in the class to which they belong.ITS PLAN
secures insurance at cost, and embraces the best features of similar associations, with such improvements added as enlightened experience has shown to be desirable for the member's advantage and the security of the association.ITS SAFETY AND SECURITY
consists in its ECONOMICAL system, its IMPOSSIBILITY of insolvency, and its SECURITY RESERVEFINALLY.
This company avoids complicated schemes and plans by means of which impossible results are promised. Its contracts are plain, easily fulfilled and liberal. It issues the following forms:

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The officers would be pleased to furnish any further particulars which may be desired in relation to the Company's affairs, or the way to obtain a policy.
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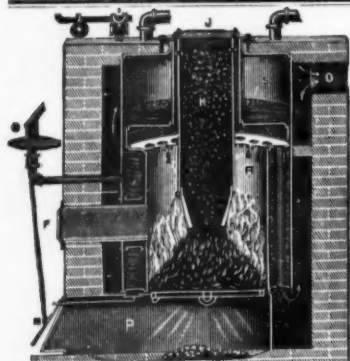
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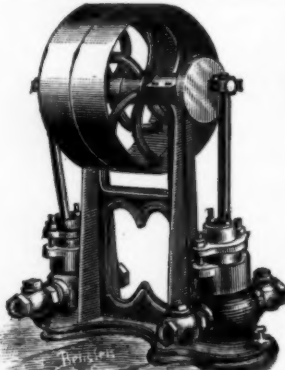
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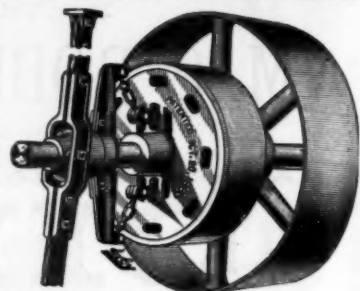
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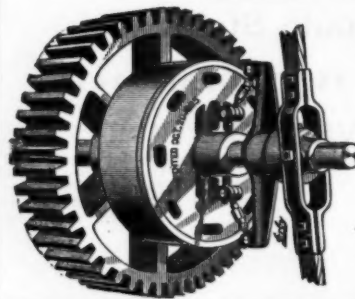
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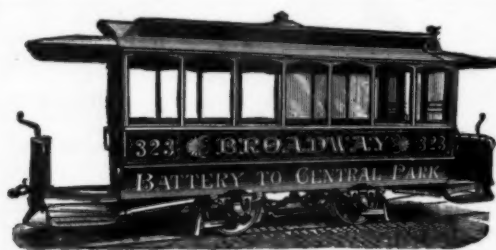
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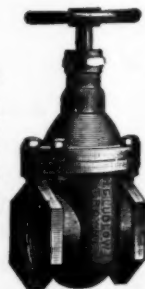
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The Brunswick Lands Improvement & Colonization Co.

Subscription Books for the Capital Stock of this Company are now open

At the Offices of the Company, Brunswick, Ga., and at (Room 20) 229 Broadway, N. Y.; (Room 4) 85 Devonshire Street, Boston, Mass., and other Branch Offices of the Company until the 1st day of August, 1887.

The Company is formed under and by virtue of a Charter granted June 19, 1886, to ANDREW J. ROGERS, JAMES M. OLMSTEAD, HENRY S. WELLES, DANIEL W. CLARK, GEORGE E. SMITH, JOHN E. SAUNDERS, and FREDERICK G. BRUNEL, and their associates, in accordance with the Laws of the State of Georgia, to run for twenty years, with the right of renewal, and authorizing a Capital Stock of \$100,000, in shares of \$50 each, with power to increase the same at any time to any amount not exceeding \$1,000,000, payable in either money, or real or personal property that may be utilized in the business of the Company. The Charter is, by comity of the States, made operative throughout the entire country.

THE PRELIMINARY ORGANIZATION

Has been duly effected by electing the following named

OFFICERS.

ANDREW J. ROGERS, Prest. JAMES M. OLMSTEAD, Vice-Prest. GEO. E. SMITH, Sec. FRED'K G. BRUNEL, Treas.

DIRECTORS.

A. J. ROGERS, Brunswick, Ga., and 227 W. 10th St., New York.
JAMES M. OLMSTEAD, 85 Devonshire St., Boston, Mass.
HENRY S. WELLES, 229 Broadway, New York.
GEORGE E. SMITH, 32 Broadway, New York.
FREDERIC G. BRUNEL, Grand Union Hotel, New York.
JOHN E. SAUNDERS, Nashville, Tennessee.
DANIEL W. CLARK, 11 Winthrop Street, Hartford, Conn.
WILLIAM B. BURROUGHS, Brunswick, Ga.

EXECUTIVE COMMITTEE.

ANDREW J. ROGERS, HENRY S. WELLES, FREDERICK G. BRUNEL, WILLIAM B. BURROUGHS.

The said Officers and Directors to hold over until the First Meeting of the Stockholders.

INCREASE OF THE CAPITAL STOCK.

In order to promptly acquire ample areas of Land and Harbor Water frontage, for colonization, wharfing and other purposes, as well as obtaining sufficient funds for carrying out the several objects of the Company, the Directors have duly voted an increase of the Capital Stock from \$100,000 to \$3,000,000, payable in either money or in any real or personal property that may be utilized in the business of the Company, (as provided in the charter,) and have authorized the opening of Subscription Books for said \$3,000,000 of Capital Stock.

EUROPEAN CO-OPERATION.

The President of the Company has perfected arrangements with competent European parties whereby they agree to subscribe, or cause to be subscribed, two-thirds of said \$3,000,000 of Capital Stock, provided the other one-third of said Stock is duly subscribed in America, and to pay in \$200,000 for every \$100,000 thereof that shall have been so subscribed in America and paid into the treasury of the Company.

TRANS-ATLANTIC STEAMSHIP LINE.

The President of the Company has also arranged with competent European ship owners for promptly putting on and maintaining a Trans-Atlantic Steamship Line between the port of Brunswick, Ga., and ports in the United Kingdom; said line to comprise a fleet capable of doing all the trans-Atlantic shipping business of the Company, and to be put on as soon as the Company announces itself ready with freights, etc., for trans-Atlantic shipment.

THE GENERAL ENTERPRISE

Comprises the building up and maintaining an extensive domestic and foreign trade at and through the city and port of Brunswick, Ga., and corresponding ports, and engaging in a general system of Lands Improvement, particularly including the building up, extending and beautifying the city and suburbs, and improving and perfecting the Harbor of Brunswick for maritime commerce, and generally aiding in developing the agricultural, mineral and other natural resources of, and settling the surrounding districts and corresponding sections of the interior, with the view to participating in the general benefits and increase in value of properties accruing from such developments and improvements, and to inaugurate and conduct

BUREAUS OF COLONIZATION AND INDUSTRY

As special departments of the General enterprise for commercially engaging in such systems of Colonization and Co operative Industries as will, from time to time, aid in relieving the Labor Markets of all surplus artisans and other workers, including the worthy, able bodied indigent classes, by drawing them off and settling or aiding them in settling and getting fairly started on alternate lots of the Company's Lands, in suitable rural and growing village districts, or so employing or aiding them to find such suitable employment as will make them reciprocally useful to the Company and ensure their becoming self-sustaining and prosperous constituents of the commonwealth, and finally reimbursing the Company with fair profits for all such assistance, thus materially aiding in freeing society of its worthy, able-bodied, destitute and suffering industrious classes by reclaiming them from all anarchical tendencies, and thence through their own prosperity readjusting them as good, law-abiding and patriotic citizens of the Commonwealth.

THE COMMERCIAL DEPARTMENT.

With the foregoing objects in view, the Company will engage in the following enterprises, taking them up and carrying them forward in such business order as will ensure the prosperity of every department of the General Undertakings, beginning with The Commercial Department proper, it being the only medium through which the more benevolent and humane purposes can be successfully carried into effect with profit to the Company. The Directors are already assured of a large paying business from the commencement of active operations in the following specified enterprises, in which the Company will be constantly turning over its funds and realizing from 5 per cent. upwards of net profits every sixty or ninety days. Viz: A General

TRANS-ATLANTIC and Coastwise SHIPPING BUSINESS

Including storing, wharfing and forwarding at and through said port and corresponding ports, and the sending of goods and other valuables through in bond or by through bills of lading to and from any and all points; the advancing of money on bills of lading and on goods and other property in store; and acting as merchants and general agents, and doing a banking and general commission business. In these departments alone the Company will find constant, active, safe and profitable employment for a considerable amount of its capital, thereby ensuring fair dividends from the start.

OTHER SOURCES OF REVENUE.

By judicious purchases, both in respect to price and locality of lands, as well as the suitability of the climate, and thence properly settling immigrants on alternate

The Stock of the Company will be Receivable at Par in Payment for Lands purchased from the Company.

ANDREW J. ROGERS, Prest. B. L. I. & C. Co.

229 BROADWAY, (Room 20,) NEW YORK.

lots thereof, carefully reserving every alternate farm or section for sale later on, the Company could reasonably expect to realize from 10 to 25 per cent. net on sales of the first alternate farms or other lots, and thence, in future further realizing from 100 to 500 per cent. and upwards from the ultimate sales of the reserved building lots, farms or sections. This plan carried out on a commensurate scale would of itself, without risk of the capital invested, enrich any well-managed company.

GENERAL LANDS IMPROVEMENT DEPARTMENT.

To buy, own and sell lands and deal in real estate and leaseholds generally, and to engage in a general system of Lands Improvement, particularly including the building up, extending and beautifying the City of Brunswick and Suburban districts, and generally developing and settling the surrounding country; the establishing and settling colonies in the interiors of the various States, and parts of States, wherein immigrant settlers and other industrial classes are needed; laying out and building up villages, towns, and cities; making roads, streets and all necessary and profitable improvements; aiding in the fuller development of the vast agricultural, mineral and other

NATURAL RESOURCES OF THE SOUTH,

Southwest and corresponding sections; the breeding and rearing of horses, mules, cattle and live stock generally, for home and foreign markets; the laying out, improving, stocking and working farms of all kinds; developing water powers for manufacturing, milling and other purposes; opening and working coal, iron and other mines, and marble and stone quarries, with a view to making money by profitably employing the idle, and making homes and livings for the worthy, able-bodied indigent classes, as well as making the several properties productive and generally enhancing the values thereof and making them more saleable. In fact, the company offers

SAFE AND PROFITABLE INVESTMENTS

In every department of the General Enterprise, basing the stability of the entire Capital Stock not only upon the General Business of the Company but upon real estate carefully chosen for its intrinsic worth, its suitability for the purposes of the Company and its improvable qualities and possible continual enhancement in value from direct and surrounding improvements.

BRUNSWICK'S ADVANTAGES in Respect to DISTANCES.

The use of the port of Brunswick for shipping purposes, effects a saving of distances to and from the following named cities as compared with New York, as follows: Louisville, about 125 miles; Denver, 250; Chynne, 260; St Louis, 275; Kansas City, 300; Chattanooga, 450; Memphis, 475; Nashville, 500; San Francisco, 505; Santa Fe, 579; Tepicobampo, (Mexico) 640; Atlanta, 667; Augusta, 687; Galveston, 700; Austin, 775; Fort Worth, 790; Montgomery, 827; New Orleans, 916; San Diego, 1,160 miles. This statement is of no less importance to emigrants than to shippers of merchandise. It should also be borne in mind that Brunswick is, by ocean route, very much nearer Liverpool than is either New Orleans or Galveston, and has the further advantage of being free from the risks always to be incurred in rounding the Florida Reefs, and the consequent heavy insurance.

THESE SEVERAL ADVANTAGES

In respect to distances, together with the central position and superiority of the harbor, and the widely extending railway connections, must necessarily ensure to the port of Brunswick a very large proportion of the export trade and corresponding import trade of the South, Southwest and Pacific Slope, especially as this port will thenceforward have such direct and regular Trans Atlantic connections with foreign markets, as well as such improved facilities for discharging and loading ships, as will enable it to successfully compete with other and older ports.

For a fuller statement of the PURPOSES and PLANS of the Company, see the Charter and Prospectuses, Documents Nos. 1, 2 and 3 of the Company's pamphlets, which can be obtained at the Offices of the Agents, or from any of the Officers of the Company.

FORMS OF APPLICATION

For Stock on the part of those who may desire to subscribe to the Capital Stock, but are unable to reach the Agent or Officer in charge of the Subscription Books, will, on application in writing to such Agent or Officer, or to the President of the Company, be forwarded, together with the necessary instructions for securing the number of Shares such Applicant may desire or that may be allotted to him or her.

PROPOSALS FOR TRANSFERRING LANDS

Or other available property in exchange for Stock in the Company will be entertained, and the suitability, quality and value of the property and titles thereto will be duly examined by proper experts in the interest of the Company; but all such proposals must be submitted in writing to an Agent or Officer, or to the President of the Company on or before the 1st day of August next, and must be accompanied with a full description, giving all particulars, including the situation and value of such property.

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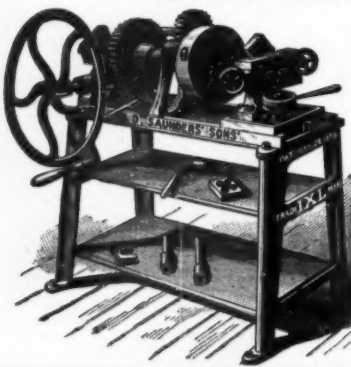
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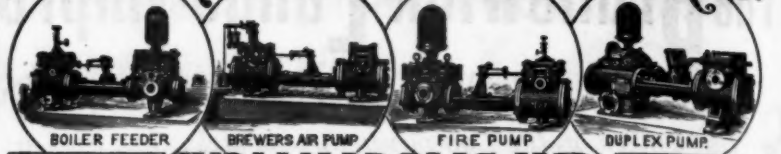
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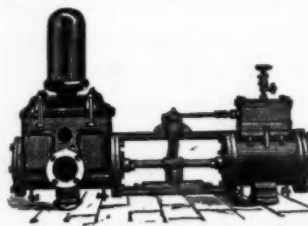
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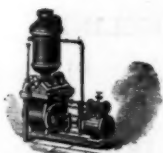
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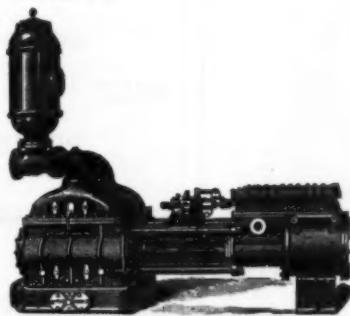
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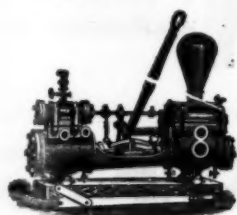
PUMP AND CONDENSER.



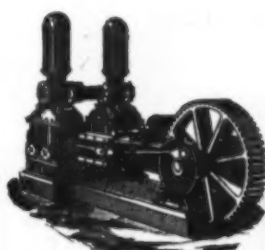
COMPOUND PUMPING ENGINE.



BOILER FEED PUMP.



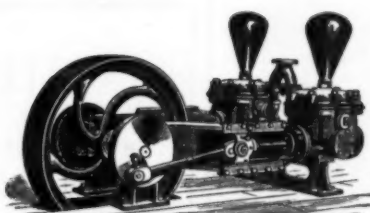
PRESSURE PUMP.



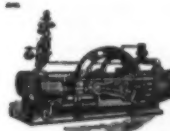
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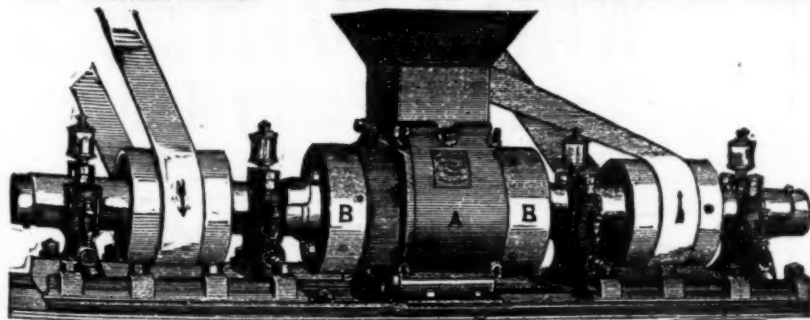
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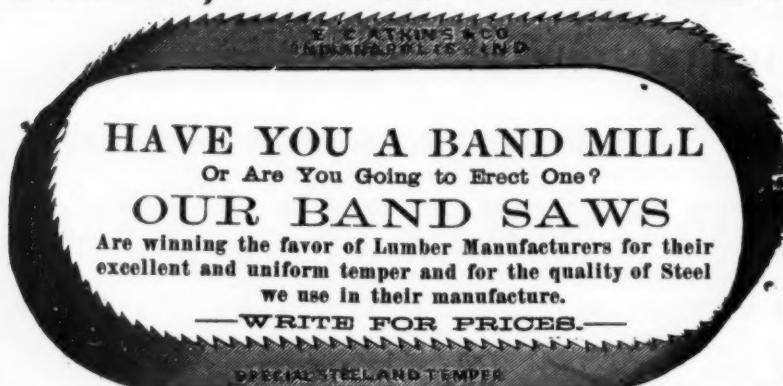
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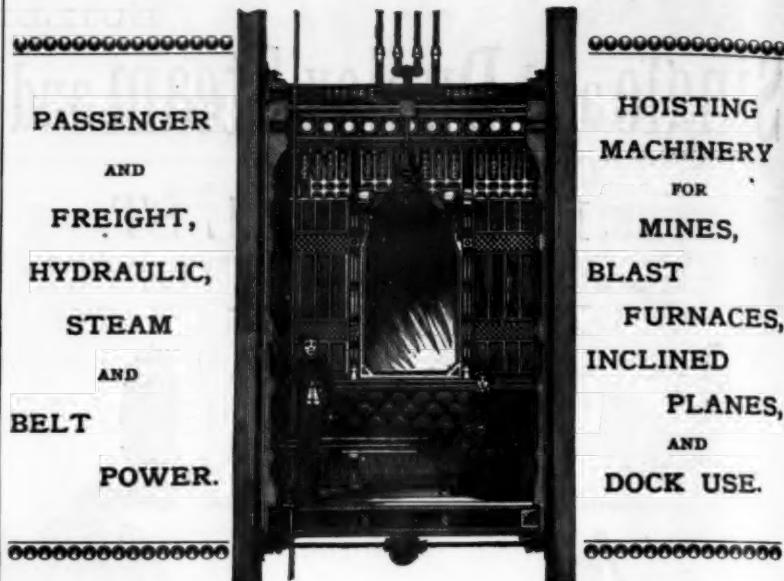
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